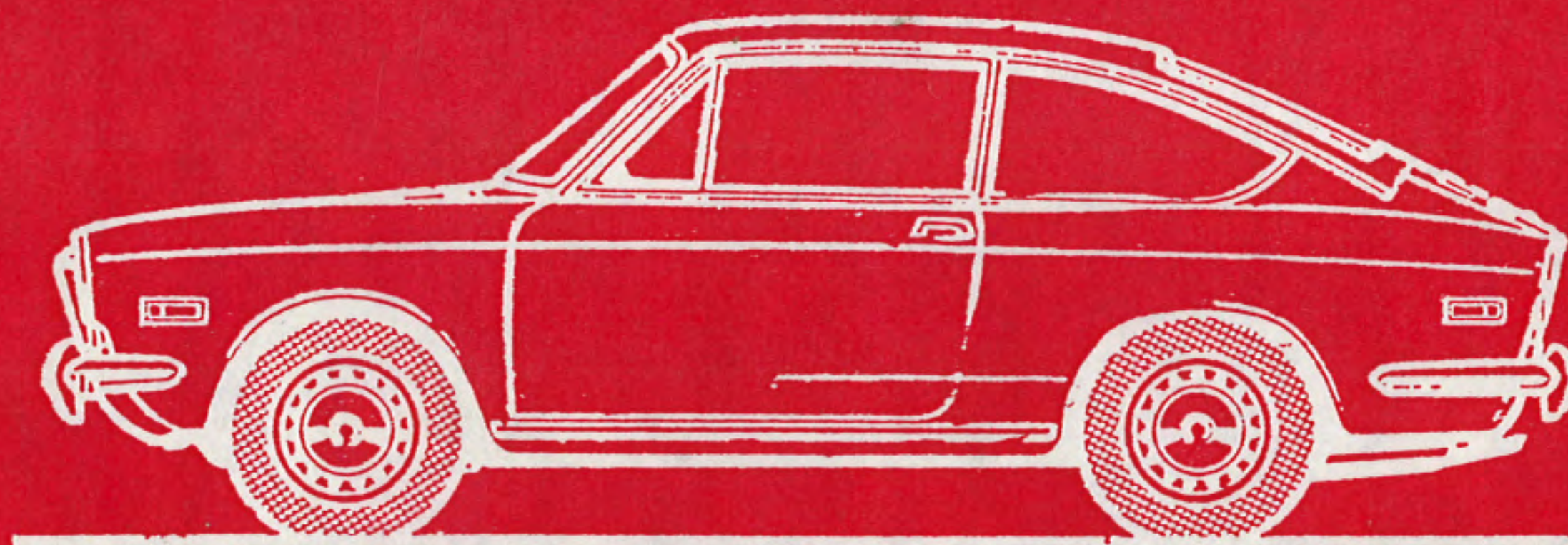
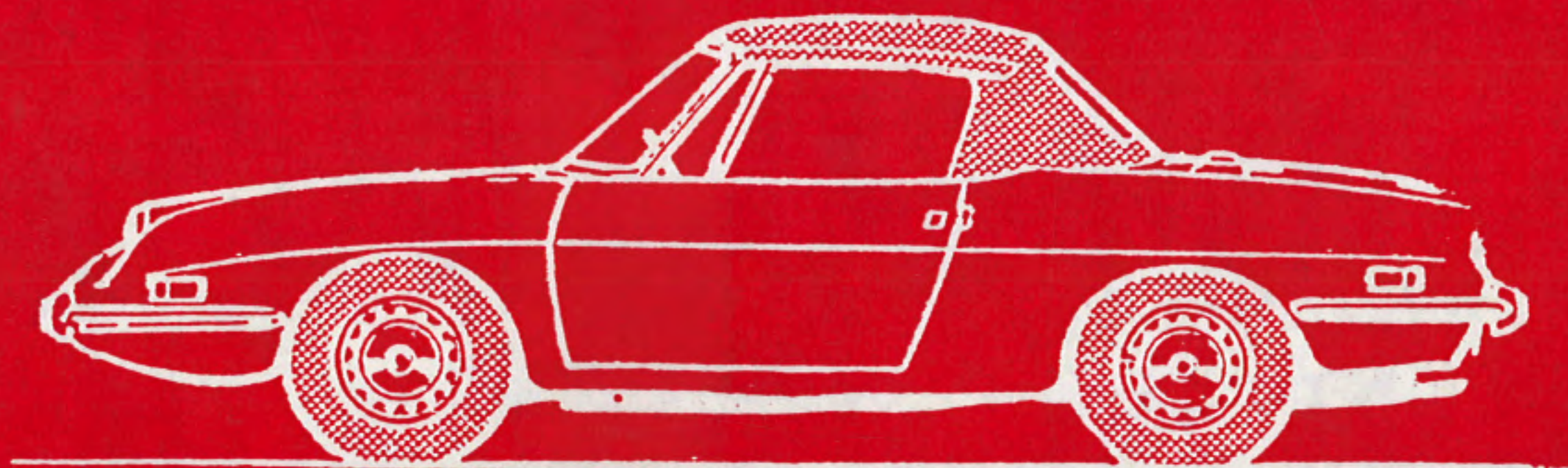


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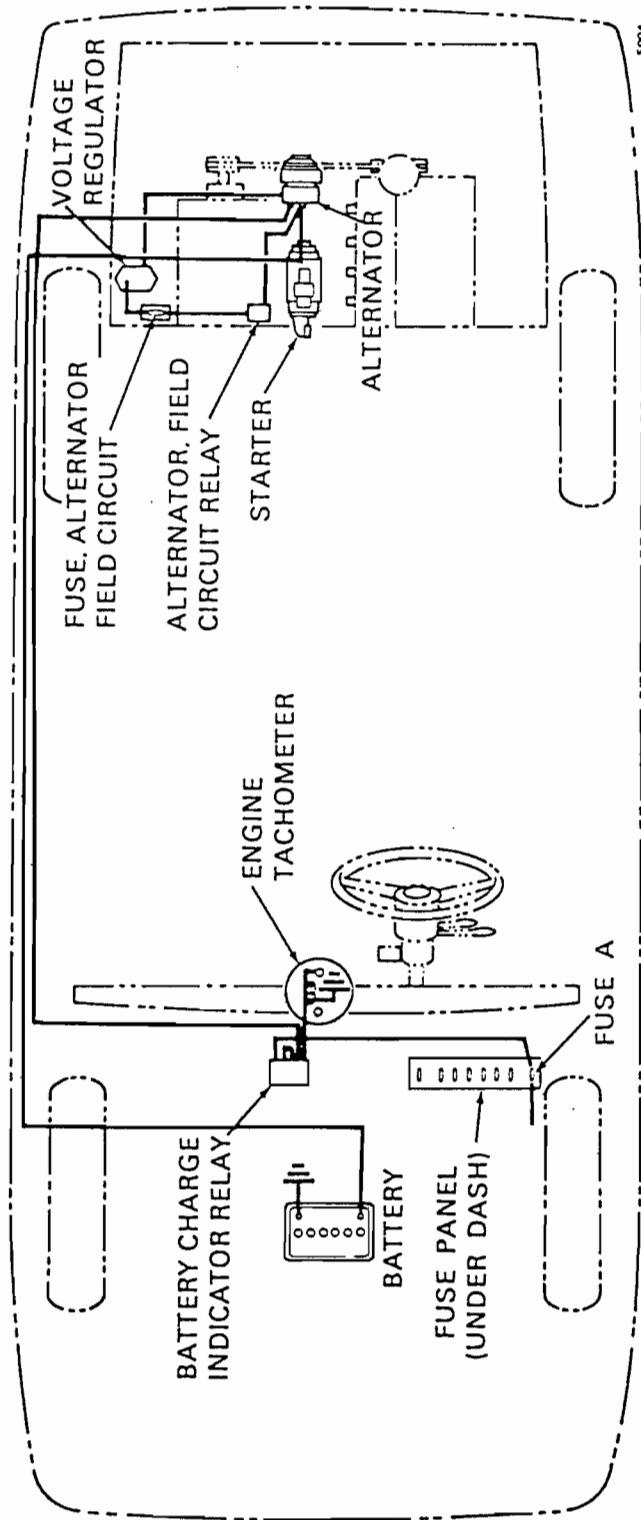
Electrical System
Proceduralized Troubleshooting Aid



BATTERY AND CHARGING SYSTEM

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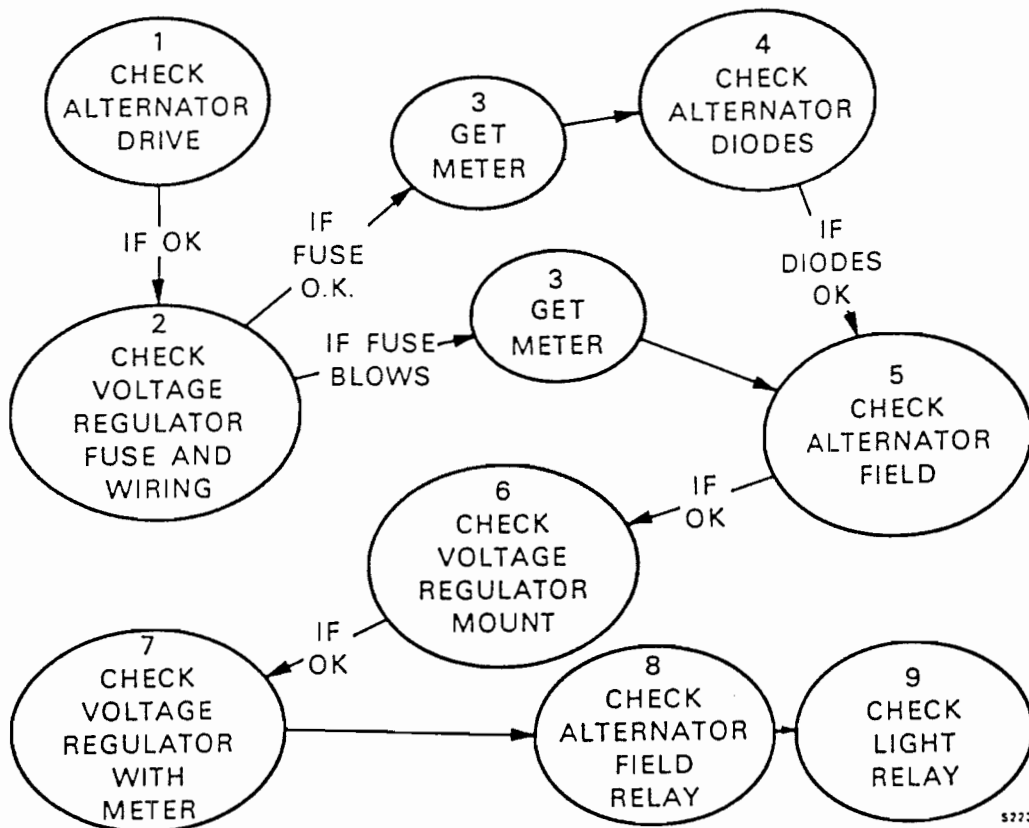
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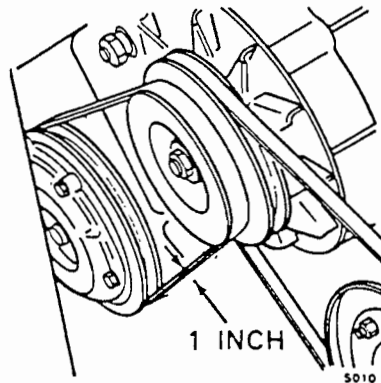
5004

BATTERY AND CHARGING SYSTEM

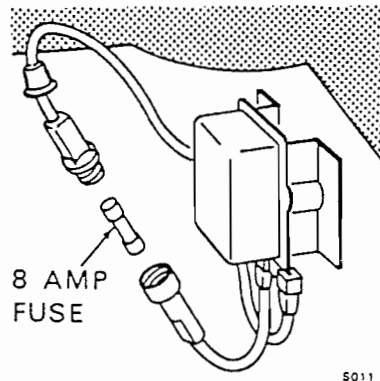
BATTERY CHARGE INDICATOR REMAINS ON AFTER ENGINE STARTS



- 1.a. Go to engine compartment. Check that alternator drive belt is not broken. If broken, replace it. If not broken, go to step b.
- b. Check that alternator drive belt is not loose. (More than 1-inch play.) If loose, move alternator to tighten belt. If not loose, go to c.
- c. Start engine. Be sure alternator shaft is turning. If not turning, replace alternator. If belt and alternator O.K., go to step 2.



- 2.a. Shut off engine.
- b. Check voltage regulator fuse (8 Amp). If blown, go to step 3, then to step 5.
- c. If not blown, go to step 3, then to step 4.
- d. Check alternator, voltage regulator, and indicator light relay for loose wires or connections.
- e. If connections are O.K., proceed to step 3.



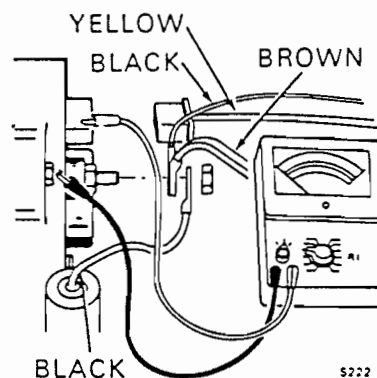
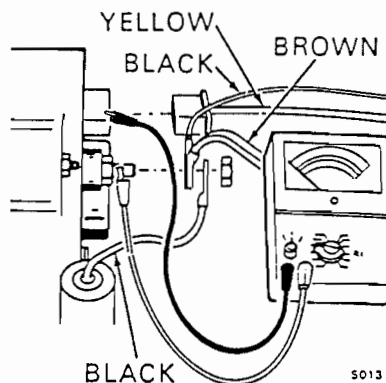
- 3.a. Get ohmmeter.

- 4.a. Go to alternator.
- b. Disconnect yellow, black, and brown wires.

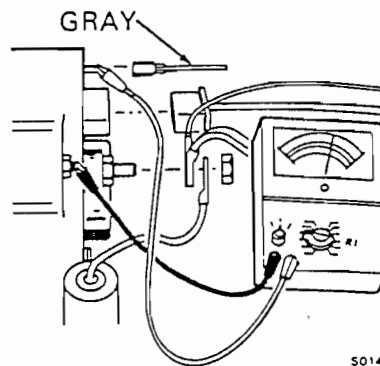
CAUTION

Brown wires are hot.

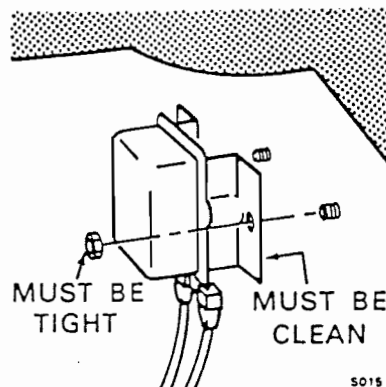
- c. Connect red meter lead to terminal 30 stud from which brown and black wires were removed. Connect black lead to terminal from which yellow wire was removed.
- d. Check that needle did not move. If needle moved toward 0, positive diodes in alternator are shorted. Replace alternator.
- e. Connect black meter lead to ground. (Clean unpainted spot on body). Touch red lead to terminal from which yellow wire was removed. Needle should not move. If needle moves to 0, negative diodes are shorted. Replace alternator. If diodes O.K., go to step 5.



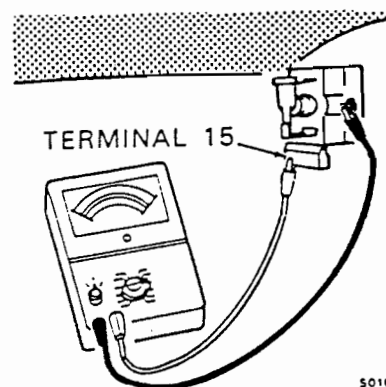
- 5.a. Disconnect gray wire from alternator.
- b. Connect red meter lead to alternator terminal 67 from which gray wire was removed. Connect black meter lead to ground.
- c. Meter should read between 14 and 20 Ohms. If not between 14 and 20 Ohms, replace brushes and clean sliprings. If meter did not move, field is open, replace alternator.
- d. If alternator O.K., go to step 6.



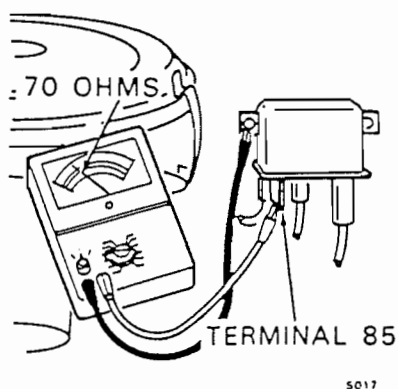
- 6.a. Go to voltage regulator.
- b. Check that grey/black wire is connected to terminal 15 and grey wire is connected to terminal 67. Check that connections are clean and tight.
- c. Check that regulator mount screws are tight.
- d. Remove regulator. Be sure base of regulator is clean. Be sure areas on body where regulator is mounted are clean.
- e. Install regulator.
- f. Replace fuse. Check system. If fuse blows, go to step 7.



- 7.a. Remove regulator cover.
- b. Attach red meter lead to terminal 15. Attach black lead to regulator base. Meter should read 26 to 30 ohms. If not, replace regulator.
- c. Insert a piece of clean paper between regulator points.
- d. Connect black meter lead to terminal 67. Meter should read between 5 and 6 ohms. If ohms are high or low, replace regulator. Replace fuse if blown.



- 8.a. Go to alternator field relay.
- b. Remove blue/black wire from terminal 85.
- c. Connect red meter lead to terminal 85. Connect black lead to relay attachment screw.
- d. Meter should read 55 to 75 ohms.
- e. If not 55 to 75 ohms, replace relay.
- f. If 55 to 75 ohms, go to step 9.



- 9.a. Go to indicator light relay.

NOTE

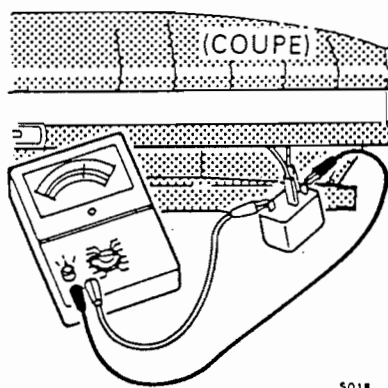
Relay under left instrument panel on Spider, and in glove compartment on Coupe.

- b. Remove yellow wire from terminal 85. Remove black wire from terminal 87.
- c. Connect red meter lead to terminal 85. Connect black lead to terminal 87.

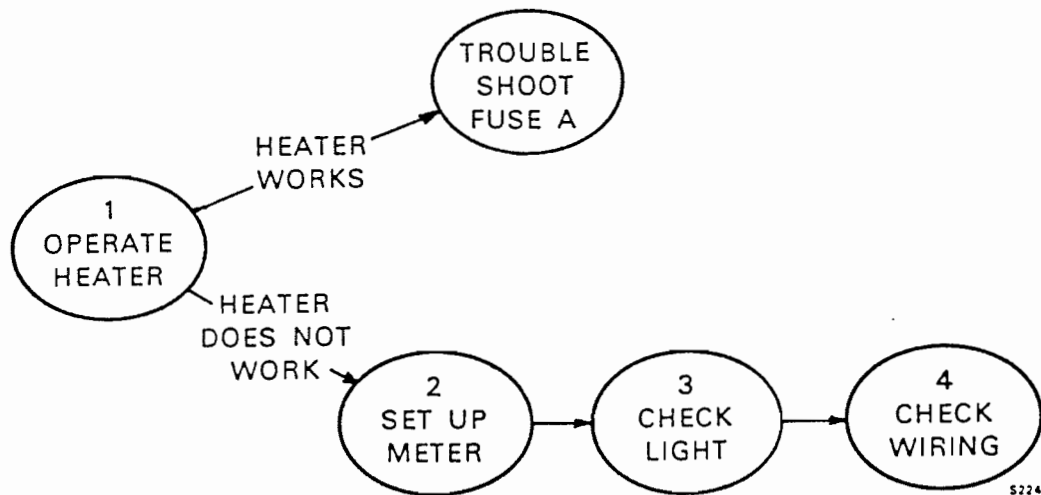
CAUTION

Do not touch relay case with lead. An incorrect reading will result.

- d. The meter should read 25 to 40 ohms. If not 25 to 40 ohms, replace relay.

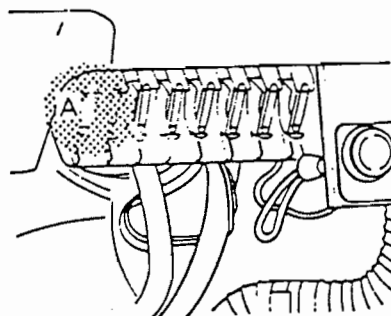


INDICATOR DOES NOT LIGHT WITH IGNITION SWITCH
ON AND REMAINS OFF WITH ENGINE RUNNING



- 1.a. Operate heater motor. If motor does not work, check fuse A. If fuse OK, go to step 2. If blown, troubleshoot fuse A circuits.

- 2.a. Get ohmmeter.

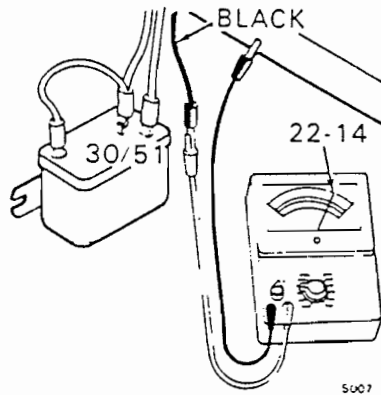


- 3.a. Go to indicator light relay.

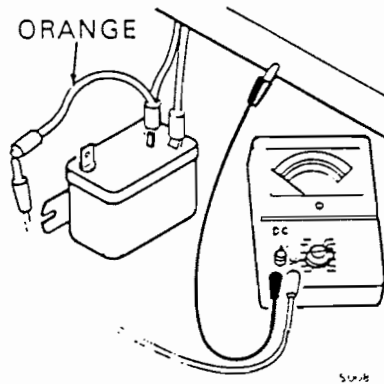
NOTE

Relay is under left instrument panel on Spider; in glove compartment on Coupe.

- b. Remove black wire from relay terminal 30/51.
- c. Connect red meter lead to black relay wire. Connect black lead to ground.
- d. Meter should read 14 to 22 ohms.
- e. If not 14 to 22 ohms, or meter does not move, replace indicator lamp. Check for broken black wire to indicator.
- f. If meter reads O.K., go to step 4.

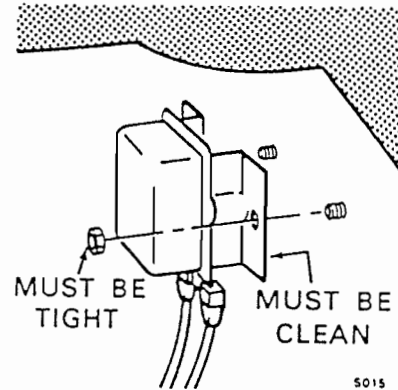


- 4.a. Disconnect either orange wire from indicator relay.
- b. Setup meter to measure volts DC.
 - c. Connect red meter lead to orange wire. Connect black lead to ground.
 - d. Turn on ignition switch. Meter should read 10 to 14 volts. If meter does not move, check for breaks and repair orange wire.

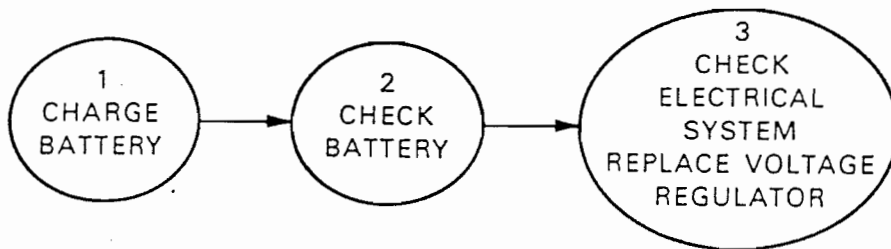


BATTERY BOILS OVER. LIGHTS BURN OUT REPEATEDLY

- 1.a. Go to voltage regulator.
- b. Check that voltage regulator mount screws are tight.
- c. Check that wire connections are clean and tight.
- d. If screws are tight and connections are tight and clean, replace voltage regulator.

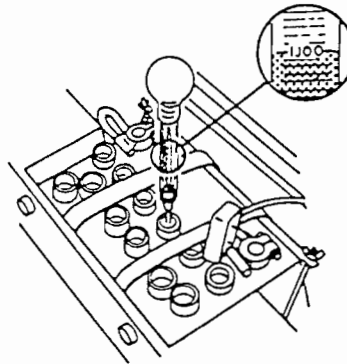


BATTERY DOES NOT STAY CHARGED



5275

- 1.a. Check that battery cells are filled with water. If battery needs water, fill cells and charge battery. If cells are full, charge battery. Go to step 2.
- 2.a. Get hydrometer. Measure specific gravity of each cell. If specific gravity below 1.100 on any cell or cells, check battery with a carbon pile load tester. If battery O.K., go to step 3. If load test indicates battery is no good, replace.

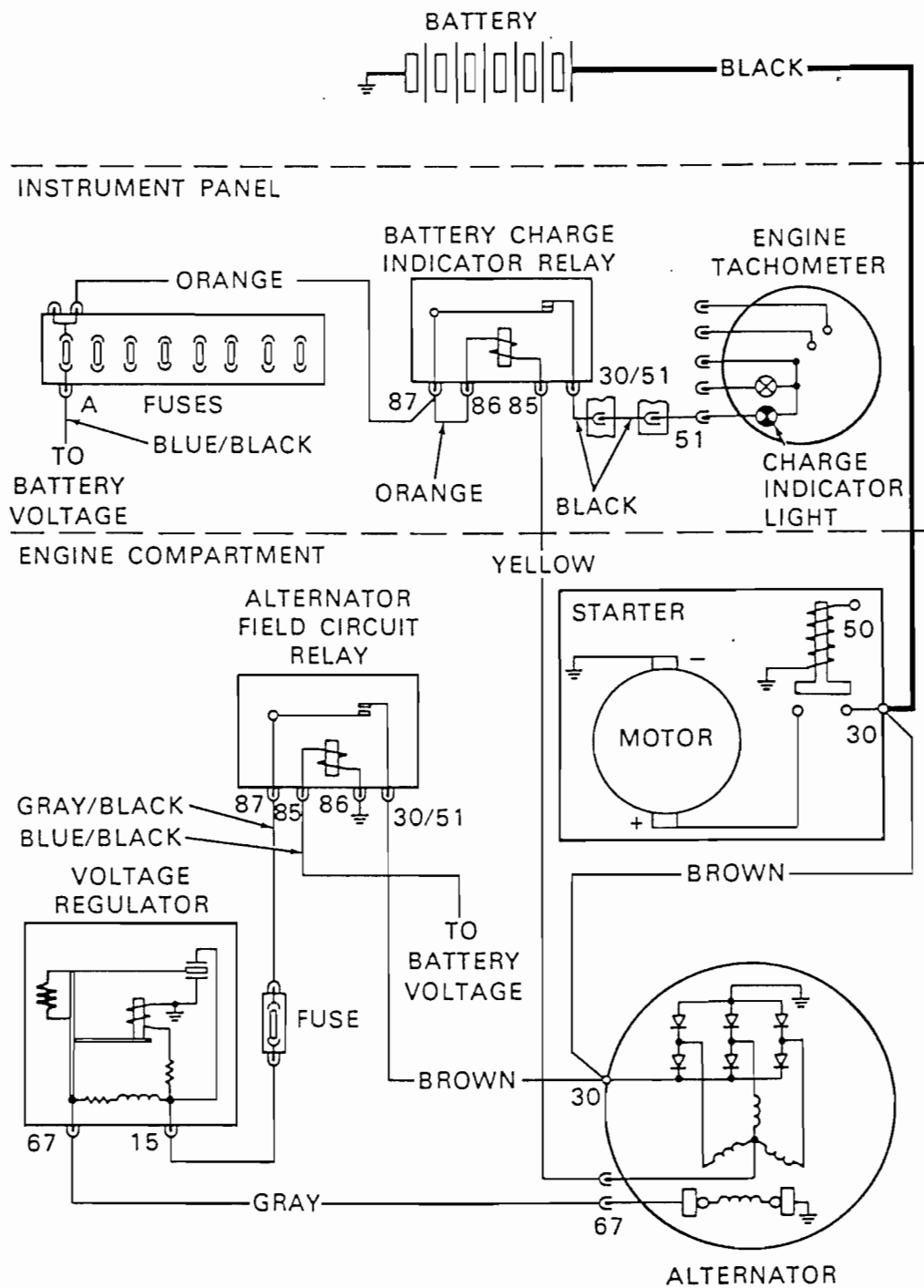


5019

- 3.a. Get multimeter. Set up meter to measure amps.
- b. Make sure all switches are OFF. Close doors.
- c. Disconnect battery positive cable.
- d. Connect meter black leads to disconnected positive cable. Connect red meter lead to battery positive post.
- e. If meter indicates 0, replace voltage regulator.
- f. If meter moves, check wiring between battery and ignition switch, and ignition switch and fuse panel. Check ignition system wiring.



5020

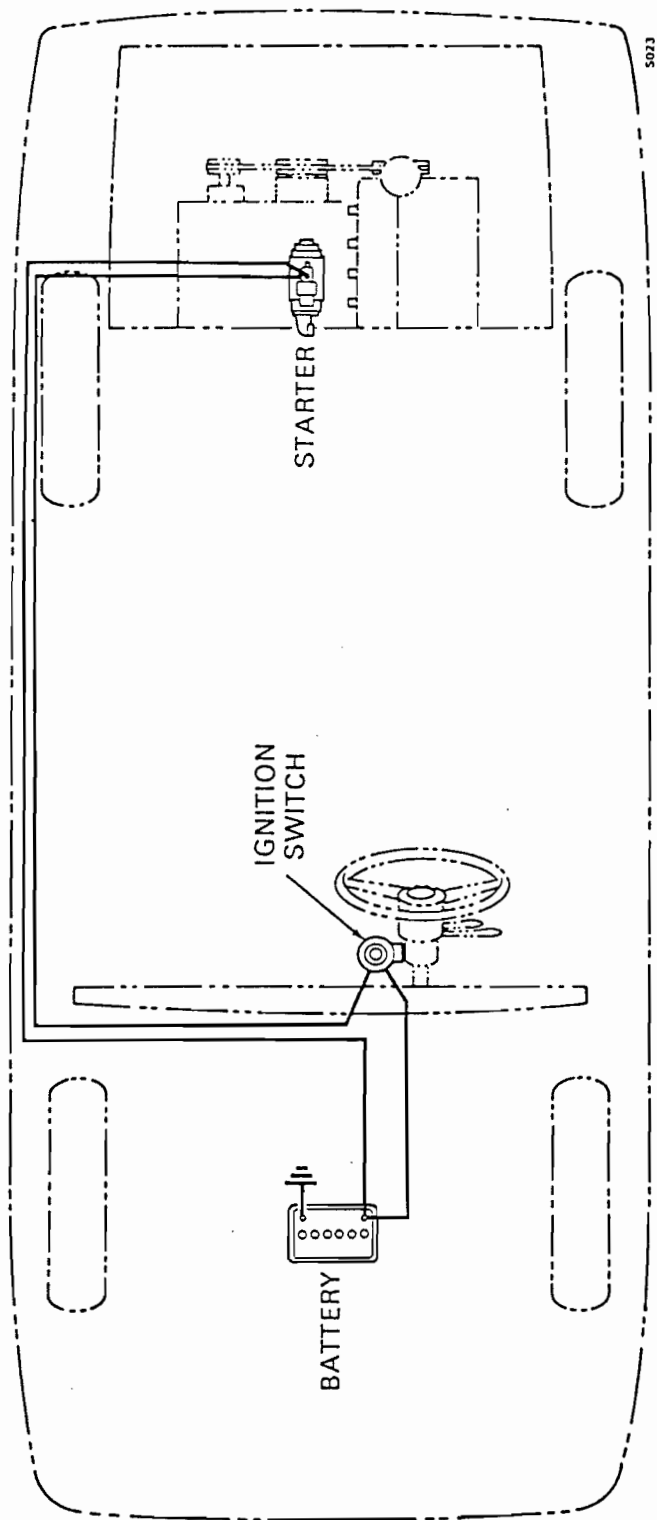


C001

STARTING SYSTEM

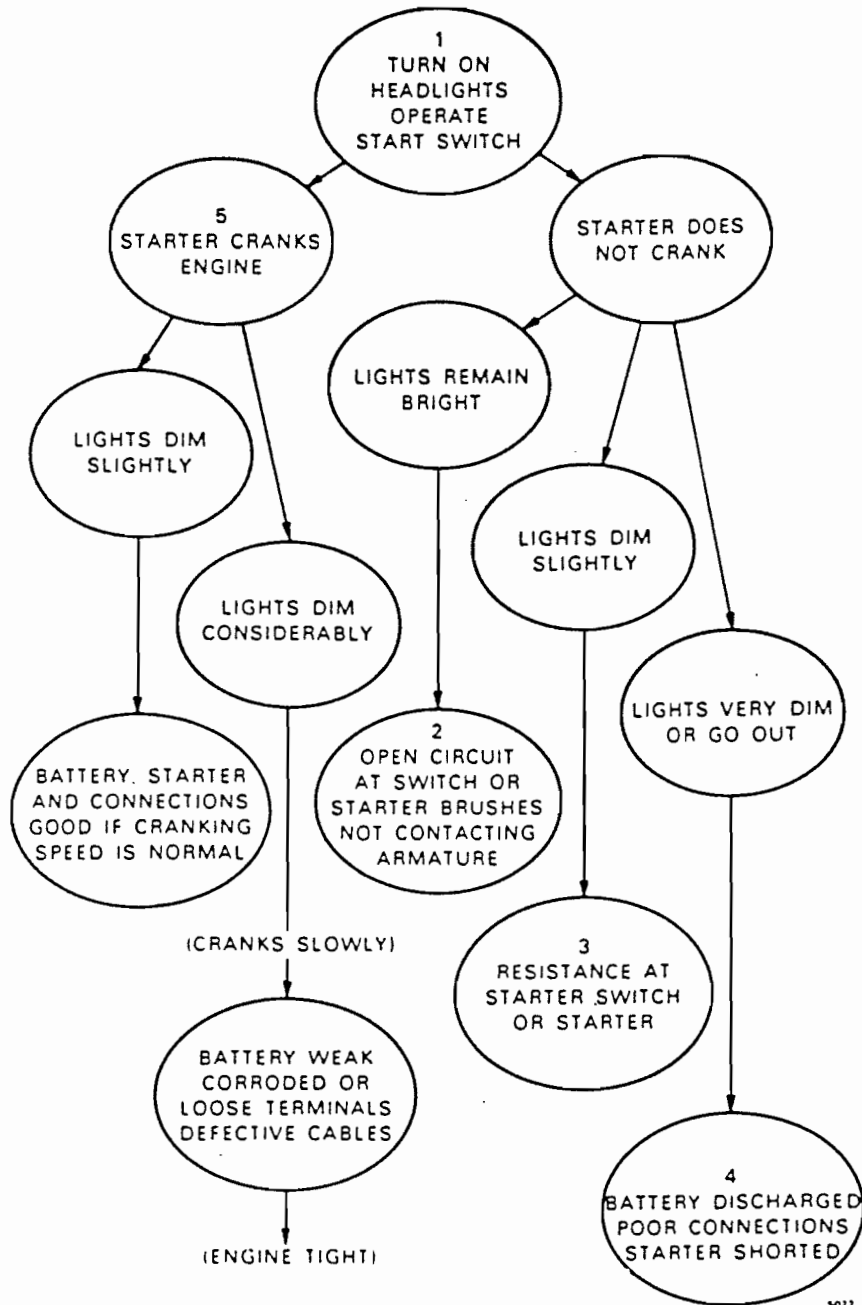
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● STARTER CRANKS SLOWLY	22



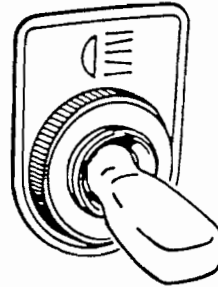
STARTING SYSTEM

STARTER WILL NOT CRANK ENGINE



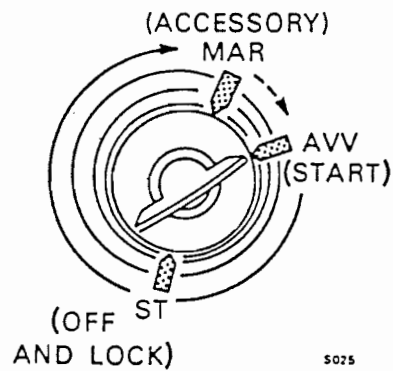
- 1.a. Turn headlight switch on.

HEADLIGHTS ON



5024

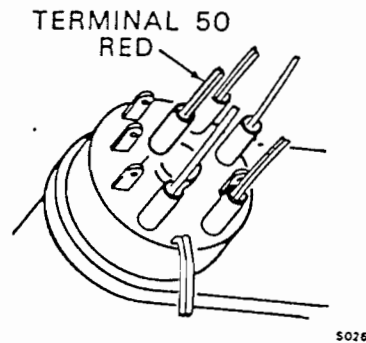
- b. Turn ignition switch to start.
c. If lights remain bright (no dimming) go to step 2.
d. If lights dim slightly go to step 3.
e. If lights very dim or go out, go to step 4.



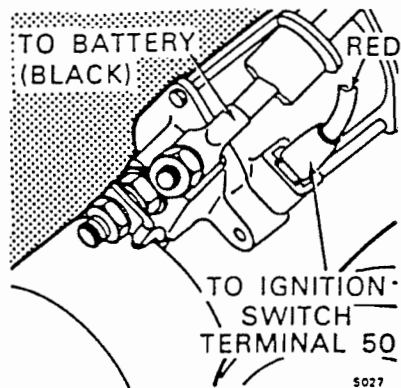
5025

- 2.a. Turn ignition and headlight switches off.

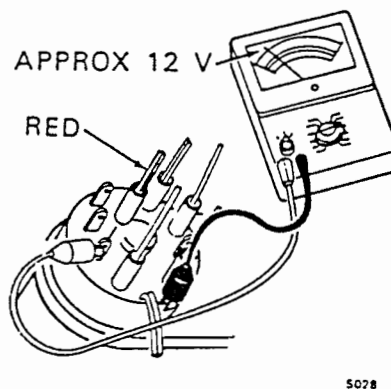
- b. Check red wire connection at battery and ignition switch terminal 50.
- c. Terminals must be clean and bright; if not, clean and reinstall.
- d. Check wire from switch to battery for obvious breaks, also battery terminals.



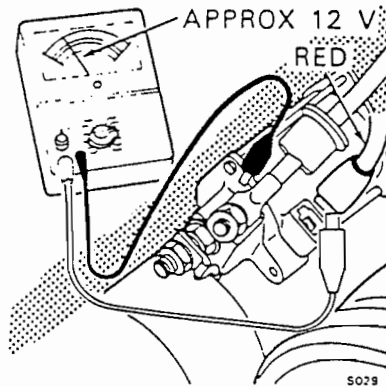
- e. If wire appears good, check terminals at starter for good connection.
- f. Connections must be clean and tight, if not, remove, polish to a bright condition, and retighten.
- g. If connections were good, check wire from solenoid to switch for breaks.



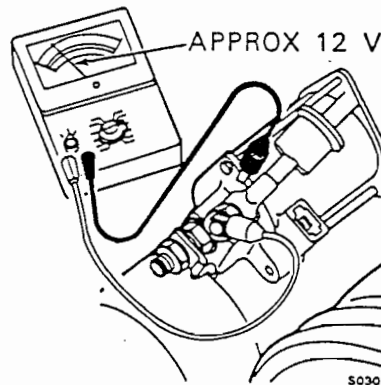
- h. If no breaks are seen, check for voltage at switch with voltmeter hookup shown.
- i. Turn ignition switch to start.
- j. If no voltage is read on meter, switch is defective and must be replaced.
- k. Turn ignition switch off. Remove meter from terminals.



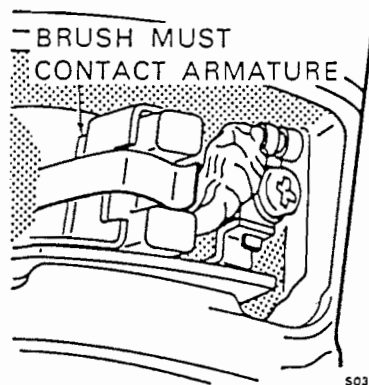
- l. If voltage was read at switch, connect meter to solenoid terminal shown and to ground on starter or solenoid case.



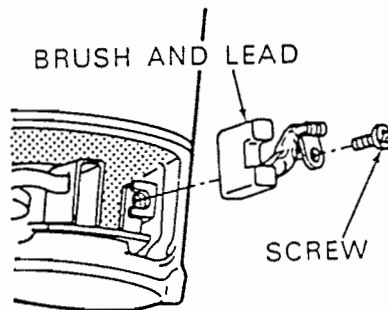
- m. Turn ignition switch to start. If voltage is indicated, move red lead of meter to terminal shown.
- n. If no voltage is read, solenoid is probably defective and starter with solenoid should be removed for bench check. Turn ignition switch off.
- If voltage is read, check voltage from battery as shown.



- o. If voltage was read, remove starter brush cover and check them for good contact.
- p. Replace defective or worn brushes.

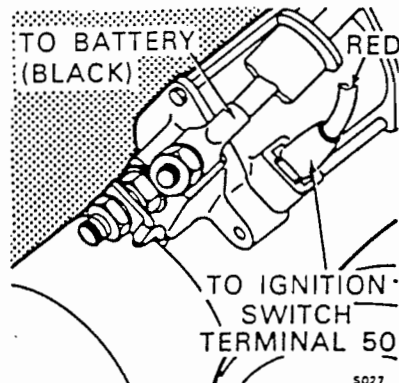


- q. Replace starter brush cover.
- r. Starter should operate satisfactorily. If not, remove for bench check.



S032

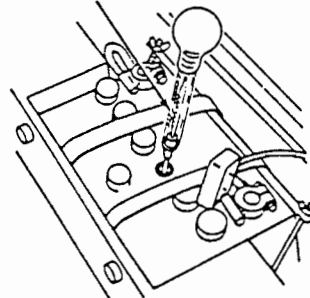
- 3.a. Check connections at solenoid terminals.
- b. Remove, clean and retighten.



S027

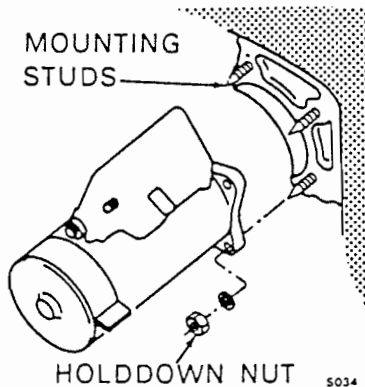
- c. Check condition of battery with hydrometer.

1.280 GOOD
1.100 OR LESS, WEAK

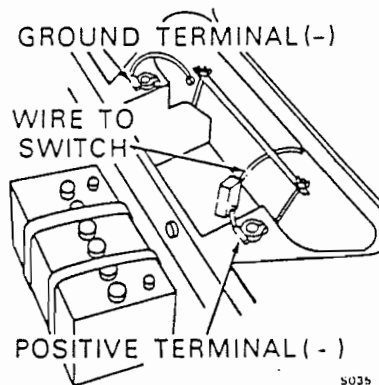


S033

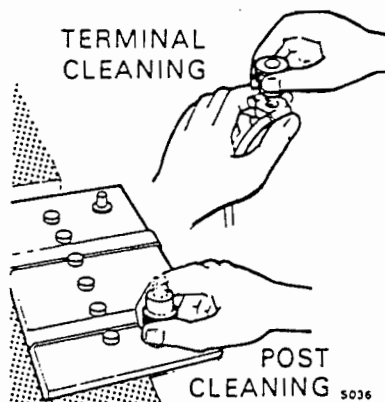
- d. If connections are good and battery checks satisfactory, solenoid or starter drive are defective and must be bench checked.



- e. If battery check indicated a weak or dead cell, recharge battery or perform a load cell test. If battery is no good, replace it.

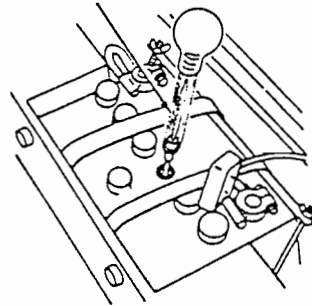


- 4.a. Check battery connections for corrosion or looseness.
- b. If necessary, clean post with a wire bristle brush. Tighten connection.



- c. Check battery condition with hydrometer.

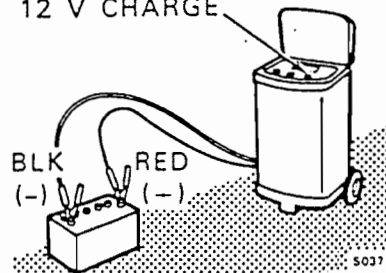
1.280 GOOD
1.100 OR LESS. WEAK



5033

- d. If weak or discharged, recharge or check with a carbon pile load tester.
- e. If defective, replace battery.
- f. Check to be sure cable from battery to solenoid is not cut or shorted at any point.
- g. If cable and battery check good, starter is possibly shorted internally and must be removed and bench checked.

SET TO NORMAL
12 V CHARGE



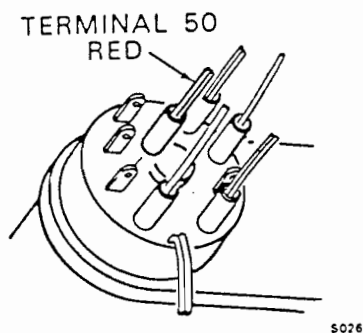
5037

STARTER CRANKS SLOWLY

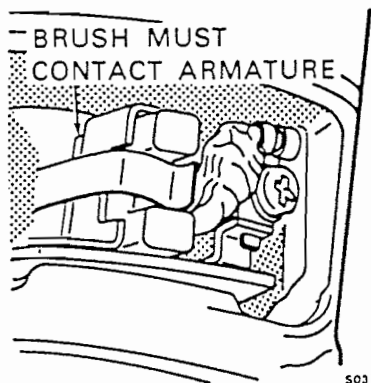
- 5.a. Check battery condition with hydrometer, or carbon pile load tester.
- b. Check battery connections for looseness or corrosion.
- c. Recharge battery or clean and retighten connections as required.

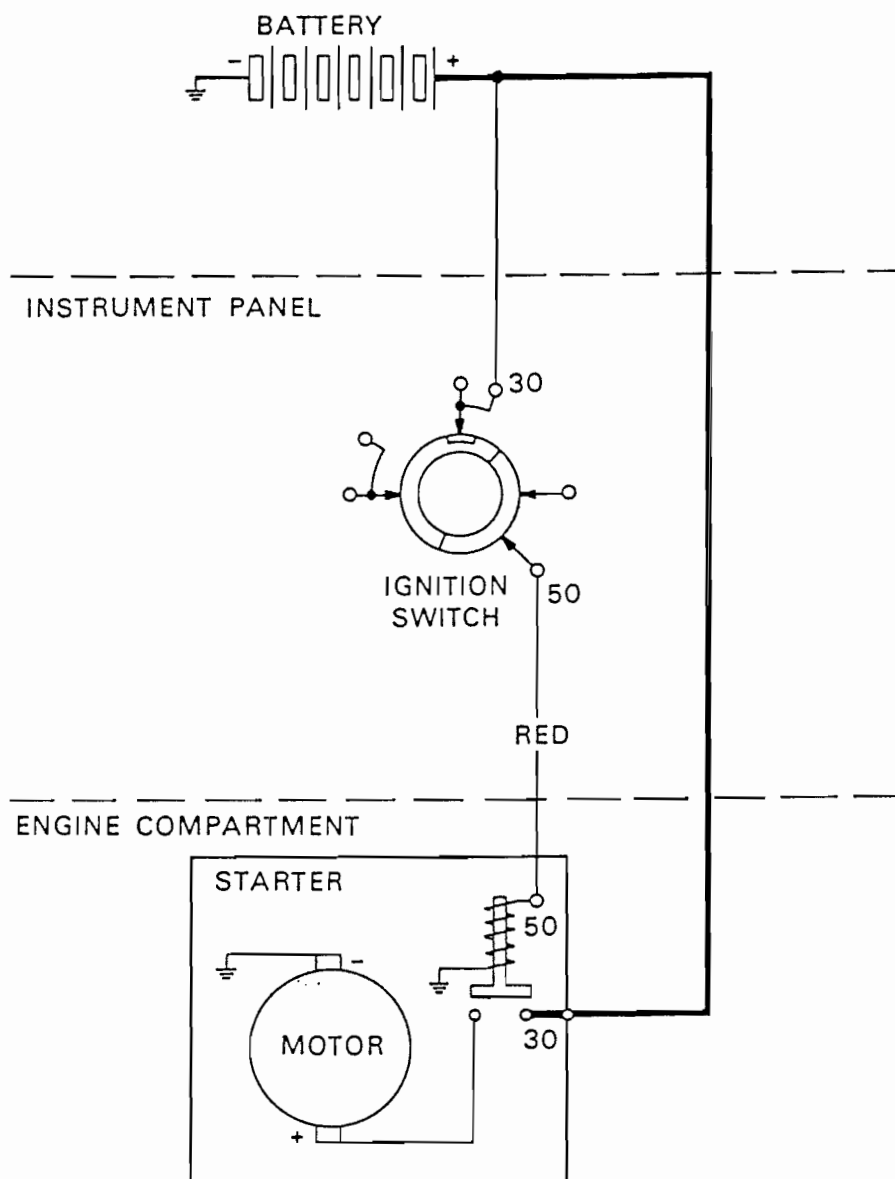


- d. Check terminals at ignition switch for looseness or corrosion.
- e. Clean and reinstall.



- f. Check conditions of starter brushes for unusual wear or improper installation.
- g. If starter continues to crank slowly after each point has been checked and found good, condition may be caused by recently overhauled or tight engine or possibly too heavy an oil in crankcase at temperatures below 40°F.



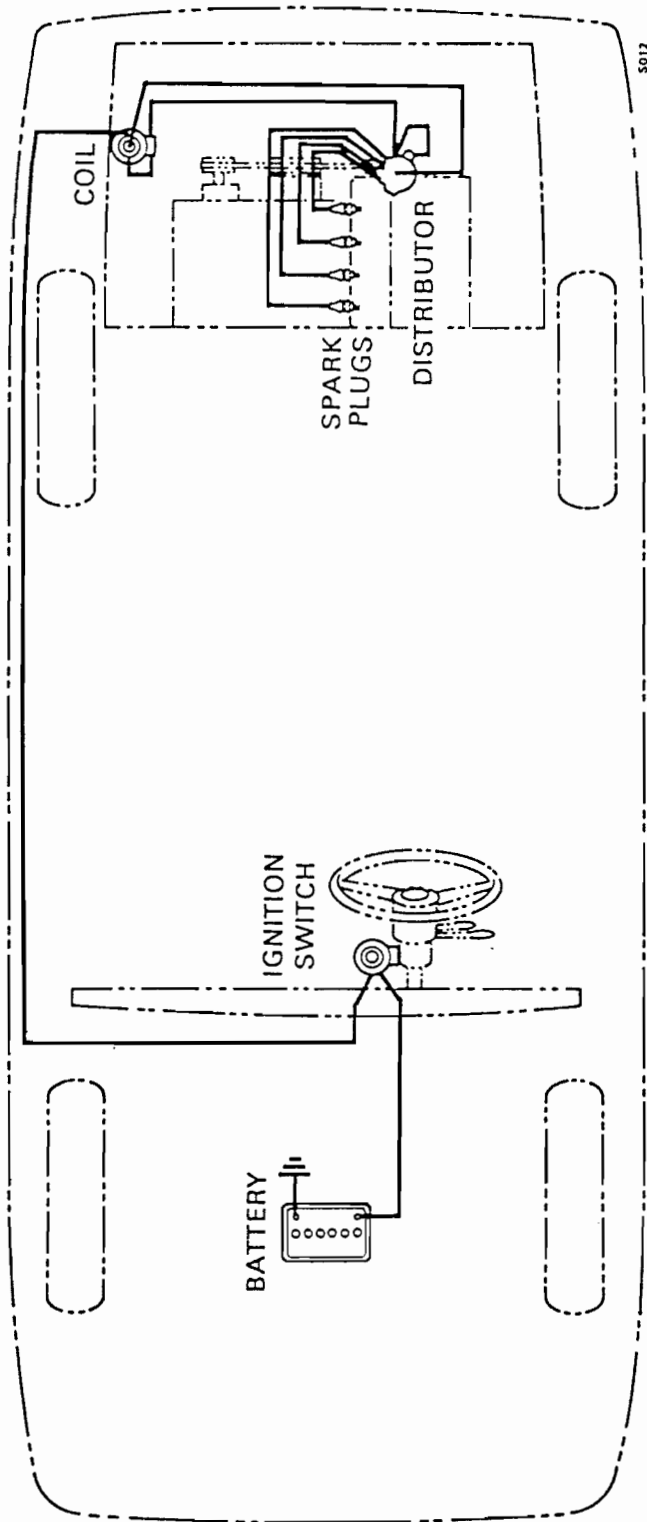


5308

IGNITION SYSTEM

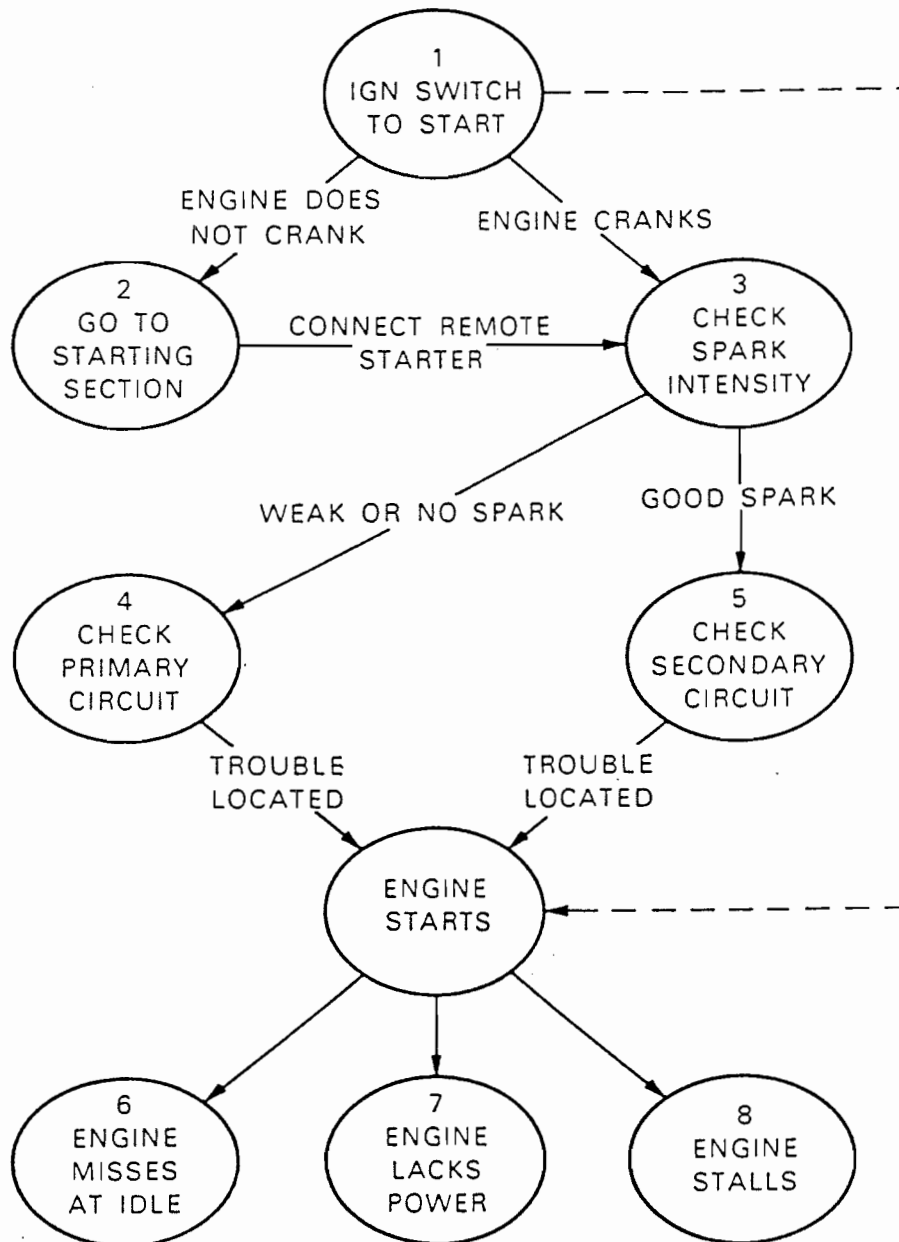
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● ENGINE RUNS BUT LACKS POWER OR MISSES AT HIGH SPEED	44
● TIMING IGNITION WITH TIMING LIGHT	47
● ENGINE STALLS	49

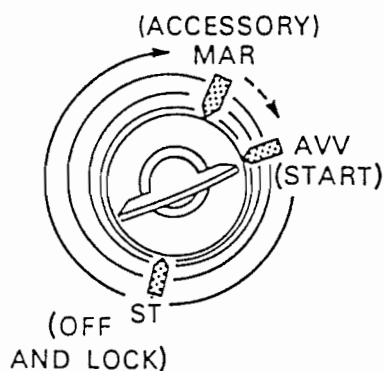


IGNITION SYSTEM

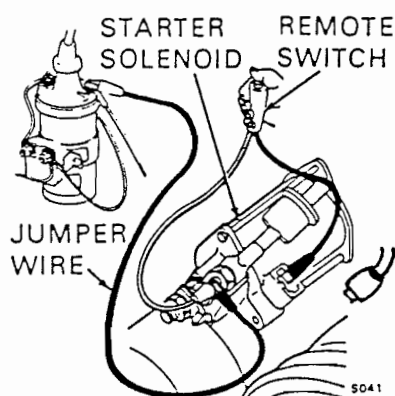
ENGINE WILL NOT START



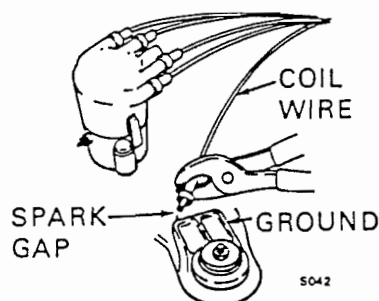
- 1.a. Turn ignition switch to start.
- b. If engine is cranking, go to step 3. If not, go to step 2.



- 2.a. If engine will not crank, go to STARTING SECTION.
- 3.a. Turn off ignition switch and connect a remote starter switch as shown.

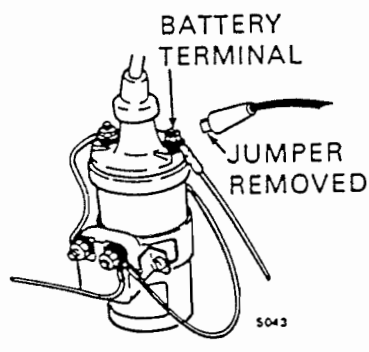


- b. Take coil to distributor lead out of distributor.
- c. Hold lead about $\frac{1}{2}$ inch from engine, crank engine and check for spark.
- d. If spark is present, go to step 5.
- e. If spark is not present, go to step 4.



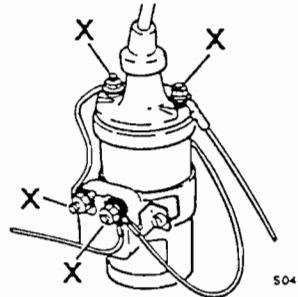
NOTE

Leave remote starter switch connected at starter but remove jumper to coil terminal.

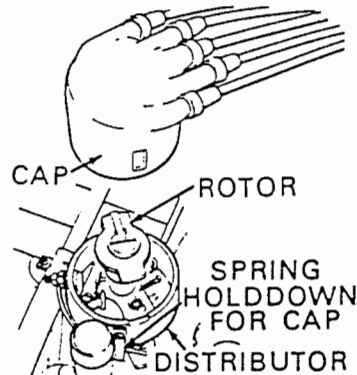


- 4.a. Check connections of wires at coil terminals shown and also at distributor. Connections must be clean and tight. All visible wiring must be unbroken and have good insulation (no bare spots).

X = CLEAN AND TIGHT

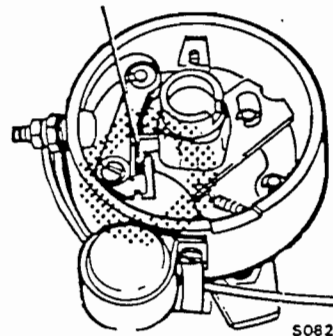


- b. If wiring and terminals are good, remove distributor cap. Check rotor for damage or wear. Replace if necessary.

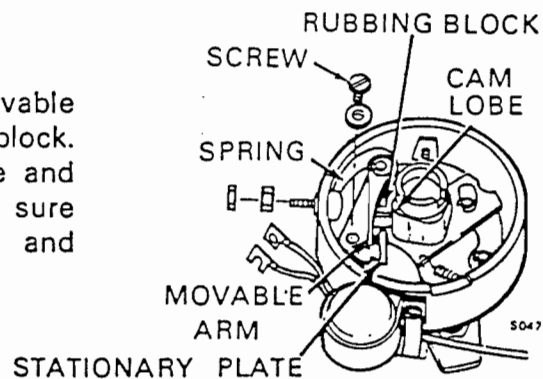


CHECK OPENING AND CLOSING OF POINTS

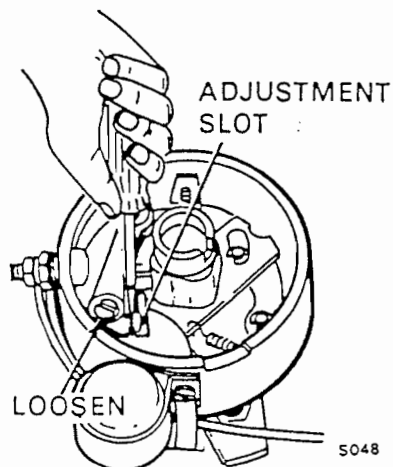
- c. Crank engine with remote starter switch and watch points to see if they open and close fully. If not, stop cranking at point where rubbing block is at peak of cam lobe.



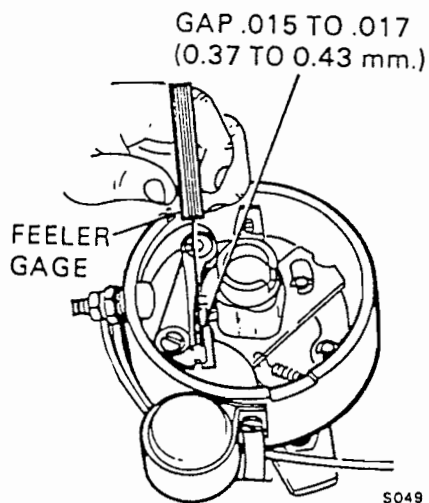
- d. Check condition of movable breaker arm and rubbing block. If visibly defective, remove and replace breaker points. Be sure all connections are clean and tight.



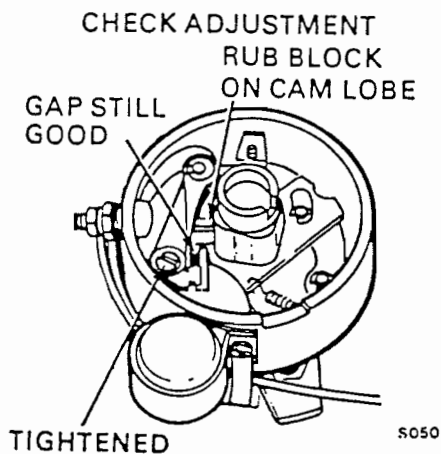
- e. Loosen breaker plate lock screw.
- f. Insert screwdriver in adjust slot. Gap must be .015 to .017 (0.37 to 0.43 mm) when checked with wire feeler gage.



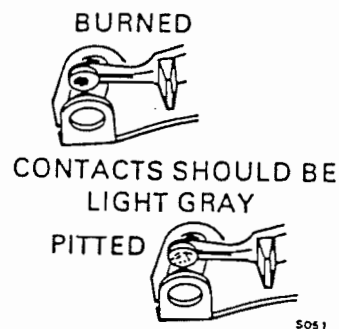
- g. Tighten breaker plate screw. Points must not close when gage is removed.



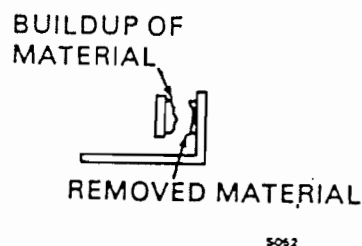
- h. Rotate cam, then recheck gap.



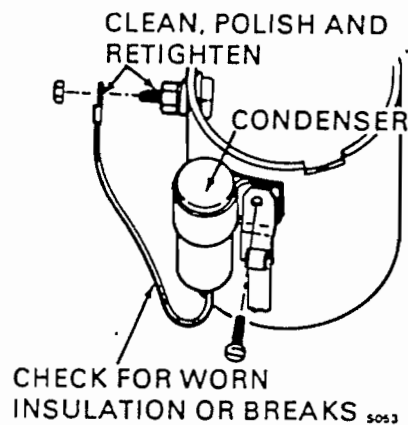
- i. If points opened and closed when cranking and gap is good, check face of points for condition. If burned and pitted, points must be replaced.



If material has transferred from one point to the other, condenser is defective and must be replaced.

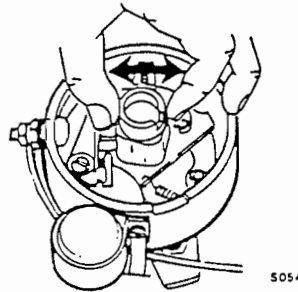


Make sure condenser lead is not worn or broken and is clean and tight at terminal.



- j. Check distributor shaft for side play (Up and down play is normal). If play is felt, remove distributor for overhaul.

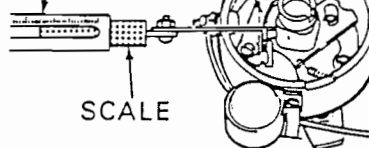
CHECK SIDE PLAY OF
DISTRIBUTOR SHAFT



- k. Measure tension of breaker points movable arm. If less than 17 ounces, replace breaker points.

MOVABLE BREAKER ARM

17 OUNCE
MINIMUM



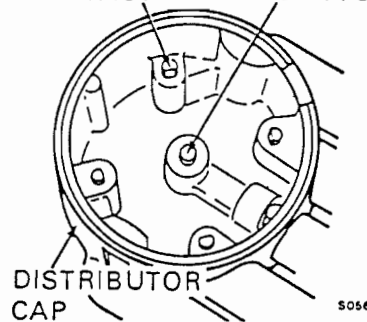
SCALE

S055

- l. Check distributor cap carbon button and rotor for condition of contacts. Carbon button must have spring tension when depressed. Rotor contacts must be clean. If not, clean and replace. If all items in distributor are good or were found defective and corrected, reinstall rotor and cap.

HIGH TENSION
CONTACT

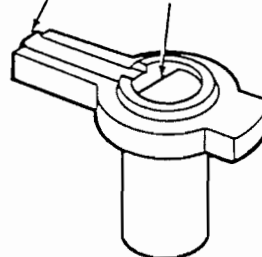
CARBON
BUTTON



DISTRIBUTOR
CAP

S056

CLEAN AND DRY

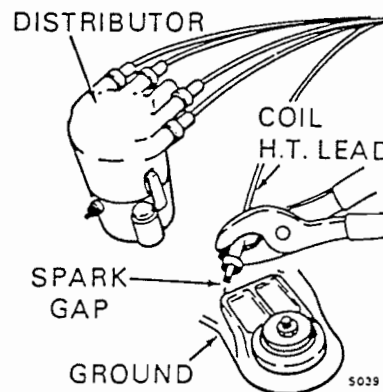


S057

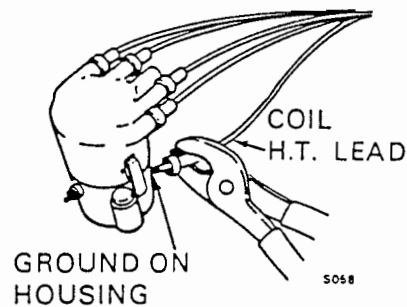
- m. Hold high tension lead $\frac{1}{2}$ inch from ground and crank engine. If still no spark or very weak, go to step n.

NOTE

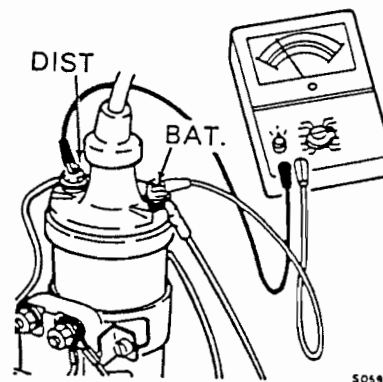
If condenser is suspected replace temporarily with new one and recheck spark.



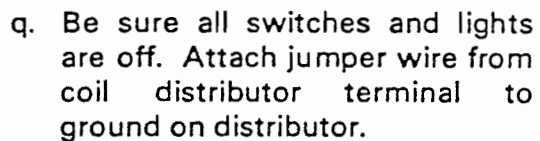
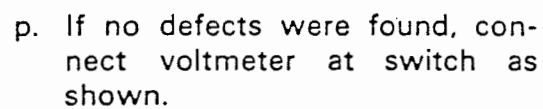
- n. Ground the high tension lead from the coil to the distributor at the distributor. Be sure ignition switch is off.



- o. Connect voltmeter as shown. Crank engine with remote starter switch. If voltage drop is 0.1 volt or less, circuit is good.

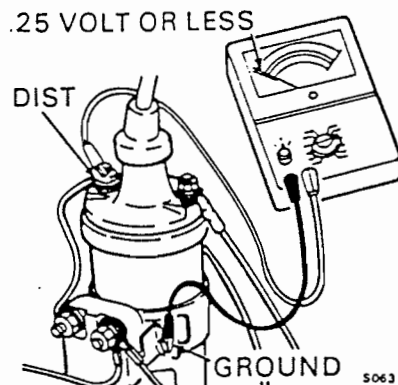


✓ = NO BREAKS OR WEAR
X = CLEAN AND TIGHT

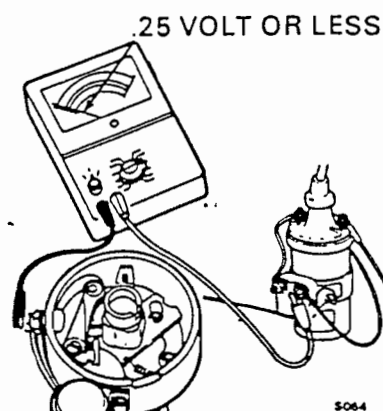


- r. Turn on ignition switch. If voltmeter reading is 0.3 volt or less, ignition switch and wire are good. If voltmeter reading is more than 0.3 volts, ignition switch or wire to switch from coil is defective.
- s. Turn ignition switch off.
- t. Remove meter and jumper.
- u. Replace ignition switch or wire.

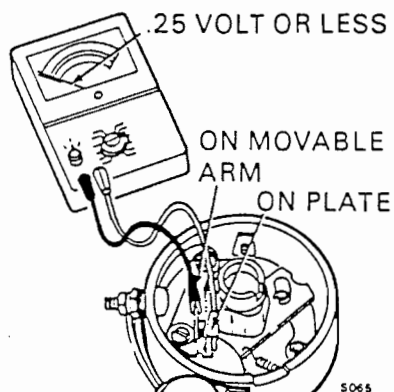
- v. If wire and switch checked good, connect meter and set as shown.



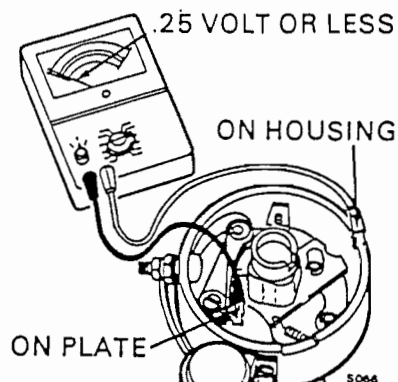
- w. Remove distributor cap, make sure points are closed.
- x. Turn ignition switch on. If voltage is 0.25 or less, the coil primary is good. If more than 0.25 volt, check voltage drop between each following points:
 - (1) Coil and breaker point connection of coil to distributor wire.



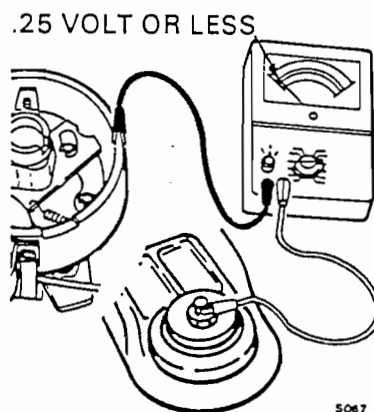
- (2) Movable breaker arm and breaker plate.



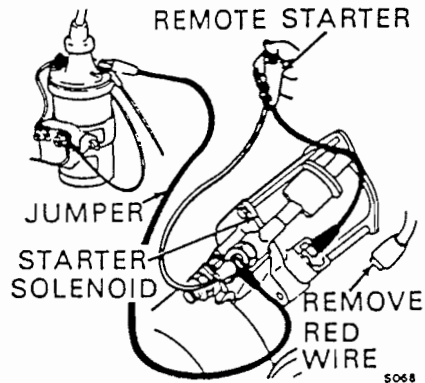
- (3) Breaker plate and distributor housing.



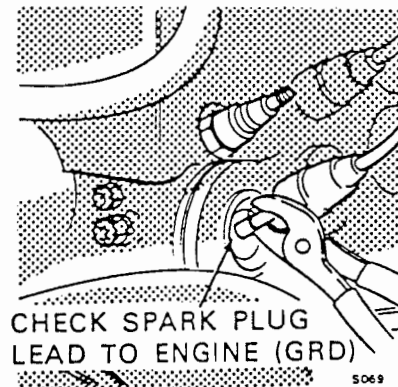
- (4) Distributor housing and ground.
y. Turn ignition switch off. Remove test leads.



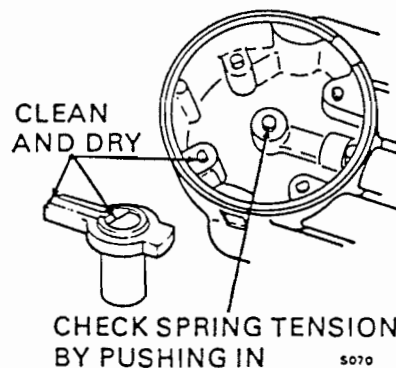
- 5.a. Put coil lead back in distributor cap socket.
- b. Connect remote starter switch.



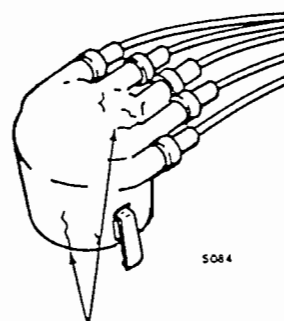
- c. Remove a lead from spark plug and hold it about 1/2 inch from engine. Crank engine to determine spark intensity. If there is no spark or it appears weak, remove distributor cap.



Check rotor contacts and distributor carbon button for defects.



Check cap for cracks.

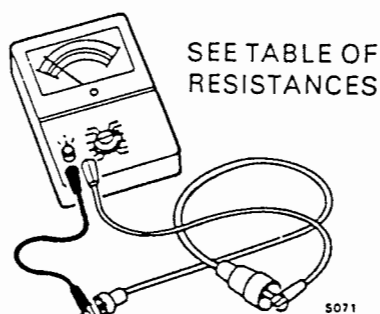


CHECK FOR CRACKS

- d. Replace rotor or cap if found faulty. If cap and rotor are good, check resistance of each high tension lead that showed weak or no spark. If resistance is greater than values shown, leads should be replaced.

NOTE

Resistance below applies to red cables only.



H.T. LEAD

SEE TABLE OF RESISTANCES

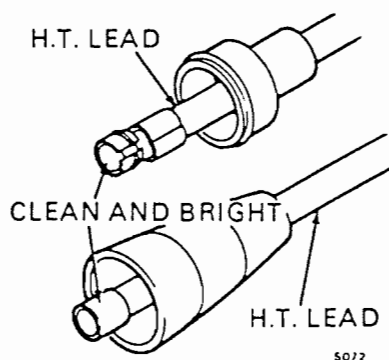
SPIDER

Lead No.	Resistance
1	700
2	800
3	800
4	1,000

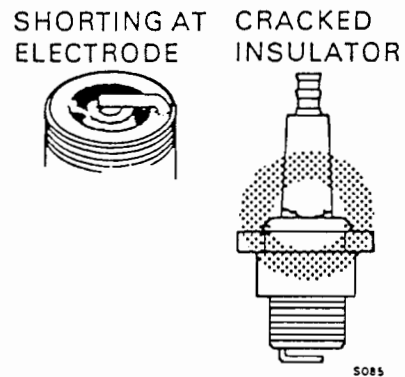
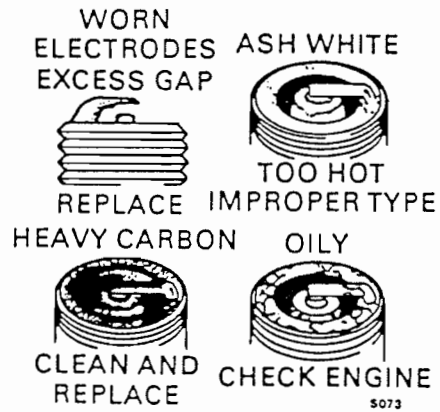
COUPE

Lead No.	Resistance
1	1,050
2	1,050
3	1,150
4	1,150

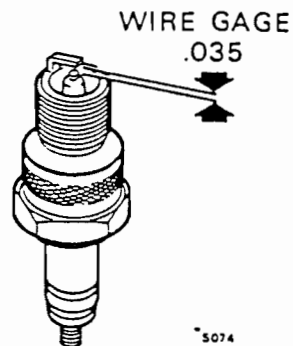
- e. If leads are good, carefully examine distributor cap sockets for dirt, corrosion or damaged terminals. Check each high tension lead terminal at each end also.



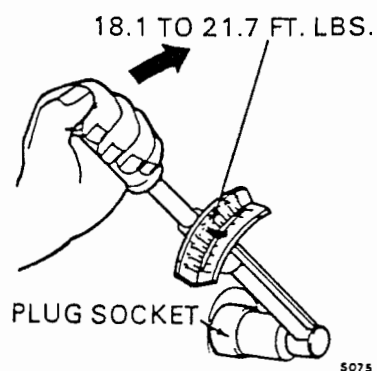
- f. If all leads, rotor and distributor cap were found in good condition, remove spark plugs. Check condition and gap.



- g. Clean and reset gap if necessary or replace plugs.



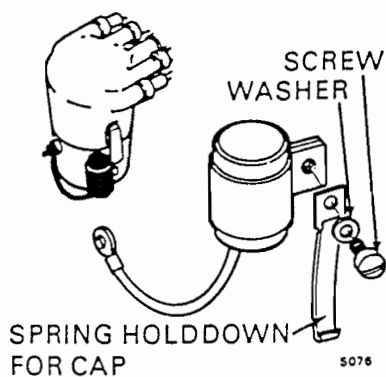
- h. Reinstall plugs. Connect leads.



- i. Engine should start if all steps have been carefully checked. If not, go back to step 4.

NOTE

Remember, if condenser was not replaced, installing a new one temporarily could eliminate problem.



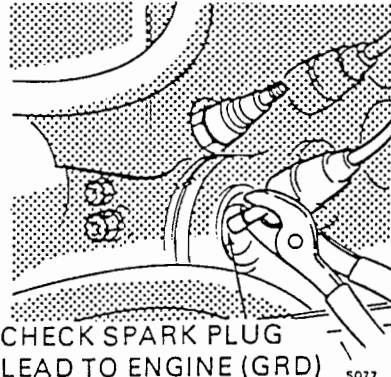
- j. If engine runs, but misses at idle, go to step 6.

ENGINE MISSES AT IDLE

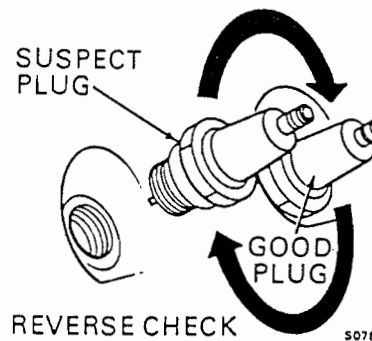
- 6.a. Short or remove one spark plug lead at a time to locate misfiring cylinder.
- b. If misfiring cylinder is located, turn ignition switch off.

NOTE

Misfiring is detected by *no* change in idle RPM when lead is shorted or removed.



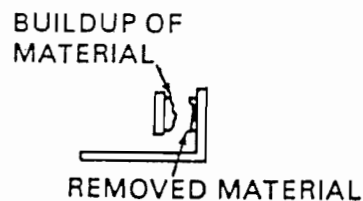
- c. Remove plug from misfiring cylinder and firing cylinder. Reverse and reinstall.
- d. Start engine and see if misfiring is in cylinder with suspect plug by repeating shorting in step 6.a.
- e. If so, remove, clean and regap plug or replace with new one.



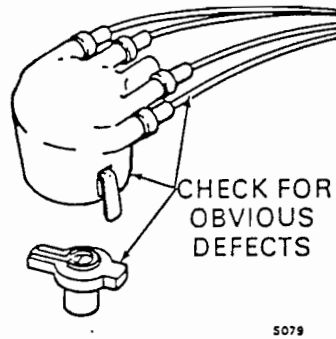
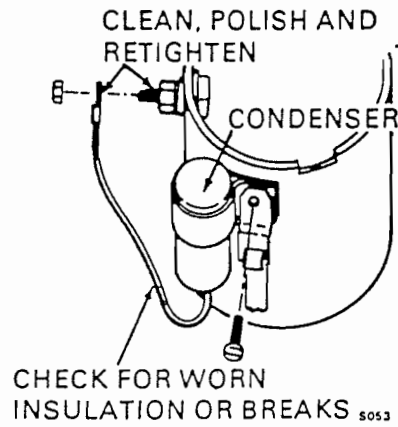
CONTACTS SHOULD BE LIGHT GRAY



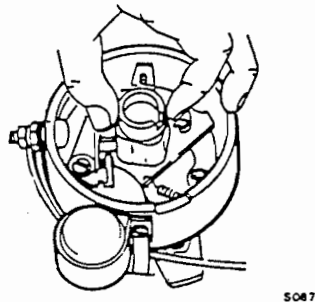
- f. If misfiring cannot be located, remove distributor cap. Check points for burning, pitting or improper gap.



- g. If point condition and gap are good, check spark plug leads, distributor cap, and rotor for defects. Replace any defective part.

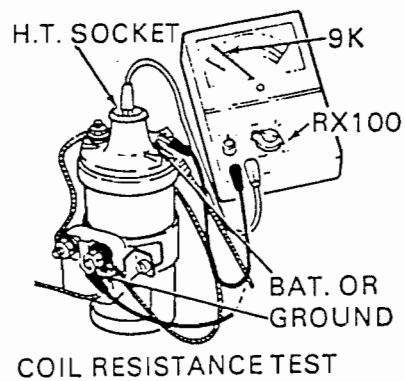


- h. If leads, cap, and rotor are good, check for play in distributor shaft. Remove distributor for overhaul or replacement if play is detected.

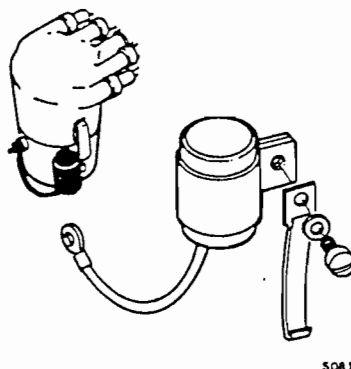


- i. If distributor is not defective, check coil for proper resistance as shown.

<i>Coil</i>	<i>Resistance (Ohms)</i>
Marelli	6,700 to 8,300
Bosch	7,200 to 8,000
O.E.M.	6,500 to 8,000



- j. If coil resistance is not within range specified, replace it. If test is good, replace condenser.
- k. Restart engine and check idle speed. If missing is still apparent, go to FUEL SYSTEM or COMPRESSION CHECK.



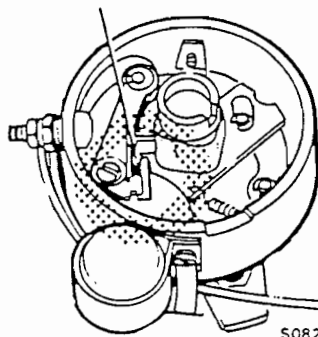
ENGINE RUNS BUT LACKS POWER OR MISSES AT HIGH SPEED

- 7.a. Remove cap and check movement of centrifugal advance. Be sure advance mechanism is free to move without binding. Check also that mechanism returns to original position when hand pressure is removed.
- b. If advance mechanism does not return, see if springs are disconnected or broken. If so, replace springs and check return operation.
- c. If springs appear good, remove them and move mechanism by hand to detect binding.
- d. If binding is felt distributor must be removed and replaced.

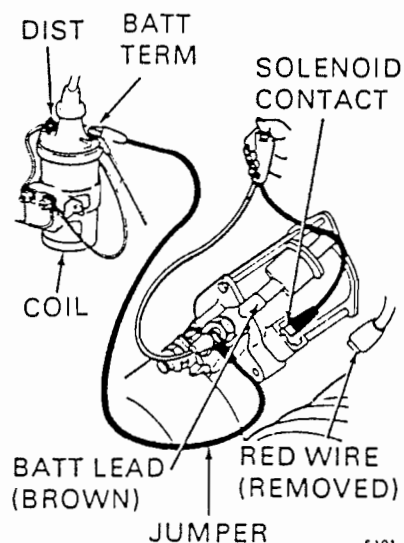
NOTE

When replacing distributor, be sure to note position of rotor before removal. New distributor must be installed in exact, same position. Check timing after installing distributor.

CHECK OPENING AND
CLOSING OF POINTS



- h. If advance operates normal proceed with timing.
- i. Connect a test lamp to coil battery terminal and ground. Remove distributor cap.
- j. Turn ignition switch on. (Test light should go on.)



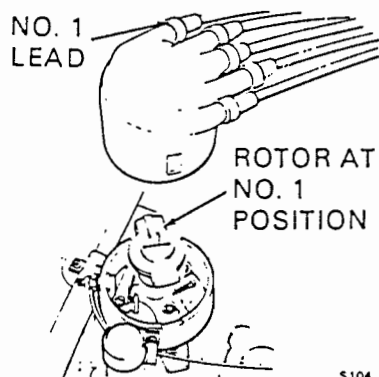
S101

- k. Turn crank shaft by hand until timing mark on drive pulley is at position shown near mark on timing gear cover. Loosen distributor lock screw.

NOTE

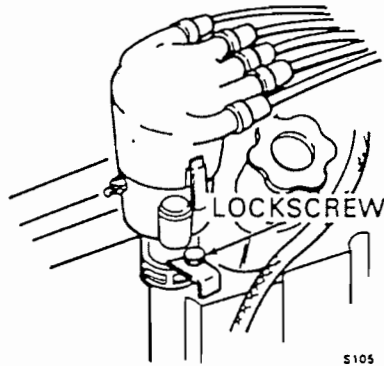
Rotor should be approximately in No. 1 firing position.

- l. Rotate distributor by hand until test light goes out. This corresponds to points opening. Repeat several times until the exact point at which points just start to open is sure.
- m. Tighten distributor lock screw.



S104

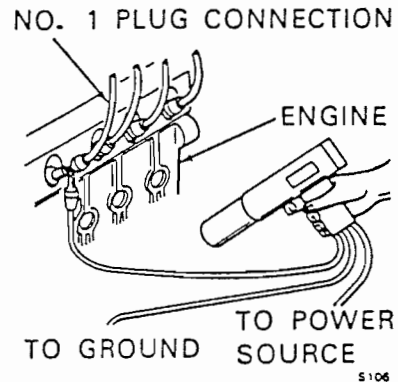
- n. Be careful not to move distributor while tightening lock screw on coupling at crank case. If point gap was set properly, ignition should be timed at this point.
- o. Reinstall plug and lead.
- p. Replace distributor cap.



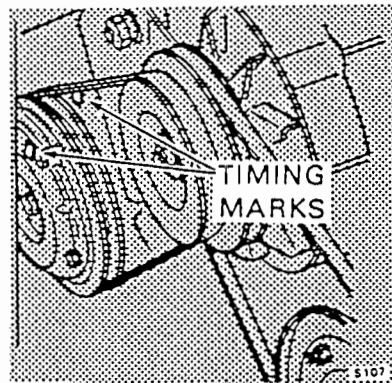
S105

TIMING IGNITION WITH TIMING LIGHT

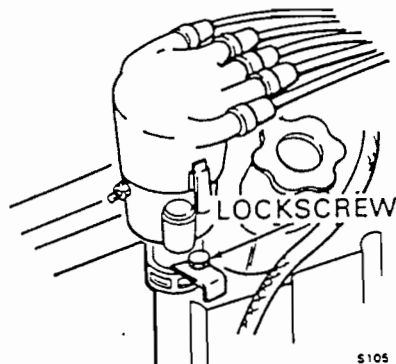
- 8.a. Remove No. 1 spark plug lead cover.
- b. Connect one lead of timing light to No. 1 spark plug.
- c. Connect black lead to ground.
- d. Connect red lead to power source.



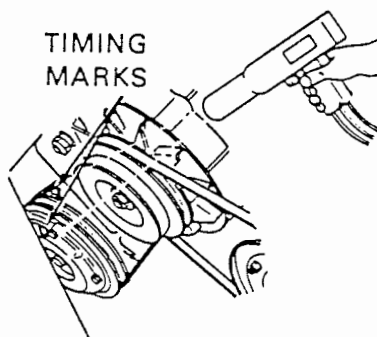
- d. Apply chalk or other whitener to marks on drive pulley and timing gear cover.



- e. Loosen screw on coupling at crankcase.



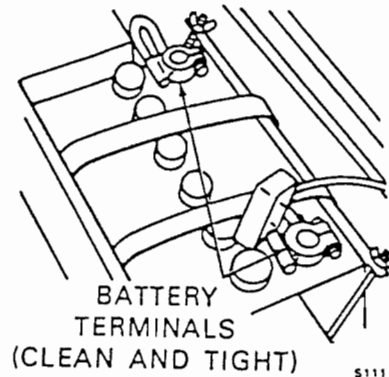
- f. Start engine, allow to idle at 850 RPM. Aim timing light beam at drive pulley.
- g. If ignition is properly timed, white marks on pulley and timing cover shall appear as shown. If not, rotate distributor body until alignment is good.
- h. Tighten screw on coupling at crankcase. Recheck timing after tightening.
- i. If engine still lacks power or misses at high speed, check CARBURETION AND FUEL SUPPLY or go back over step 4.



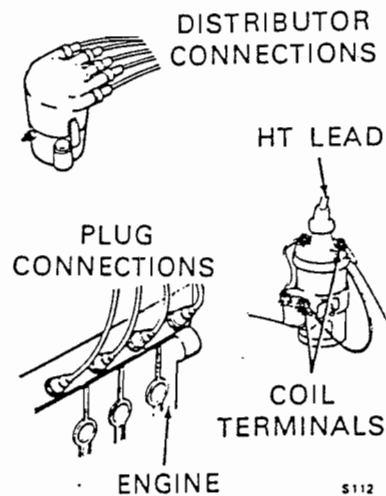
S110

ENGINE STALLS

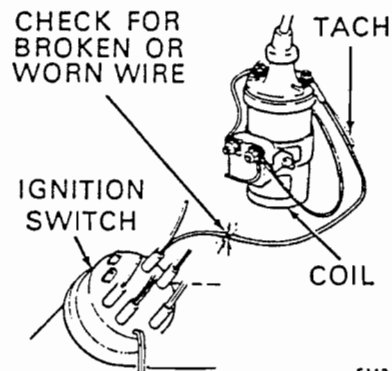
- 9.a. Check battery terminals for looseness or corrosion. Clean to bright condition and tighten.

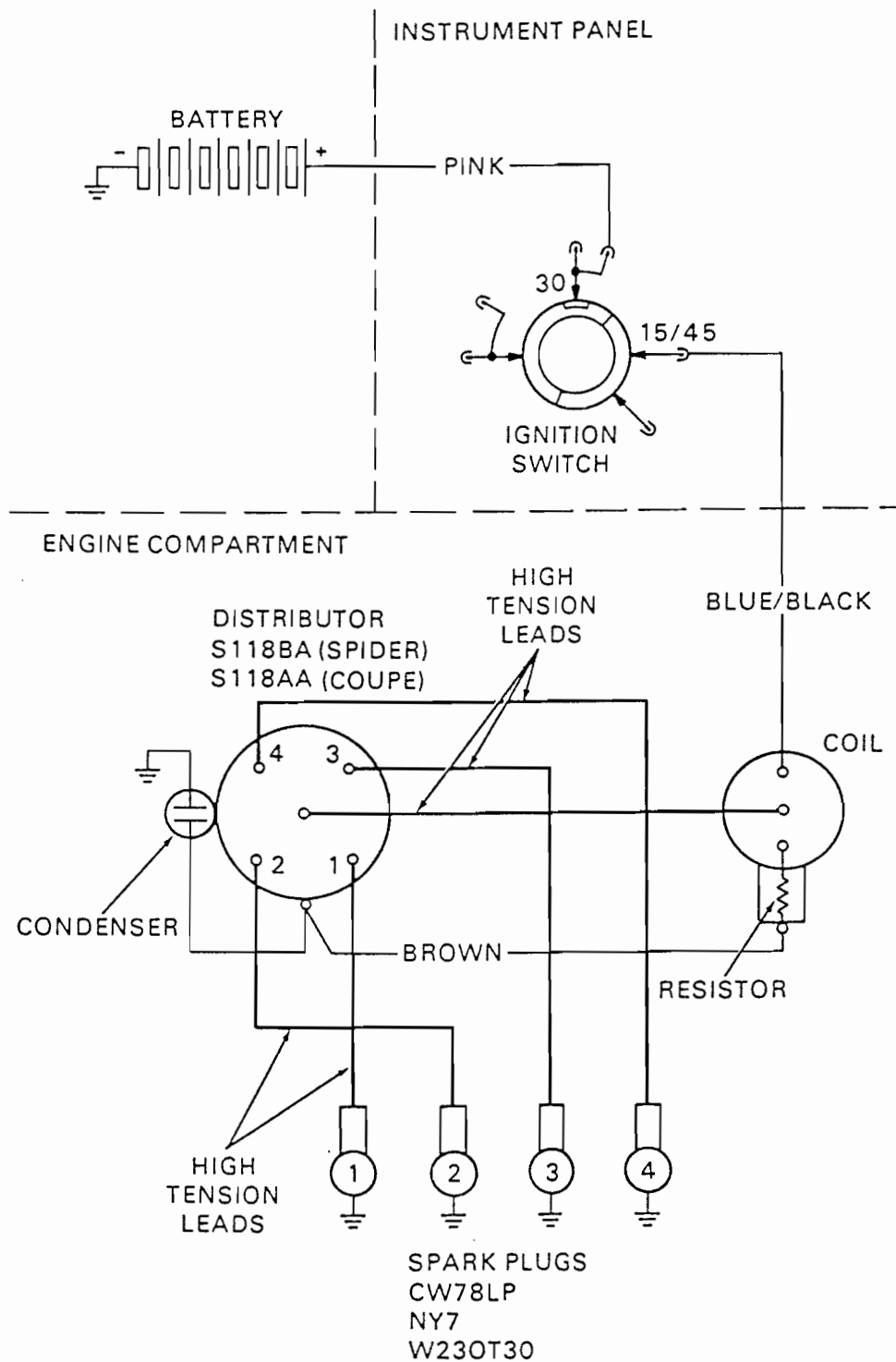


- b. Check connections of all high tension leads for good connections. Remove corrosion, dirt or moisture or replace if defective.



- c. Inspect primary wire connection at ignition switch. This must be clean and tight. Wire to coil must not be bare at any point.
- d. If condition still occurs, check CARBURETION or COMPRESION. If these are good, repeat procedures in step 4.





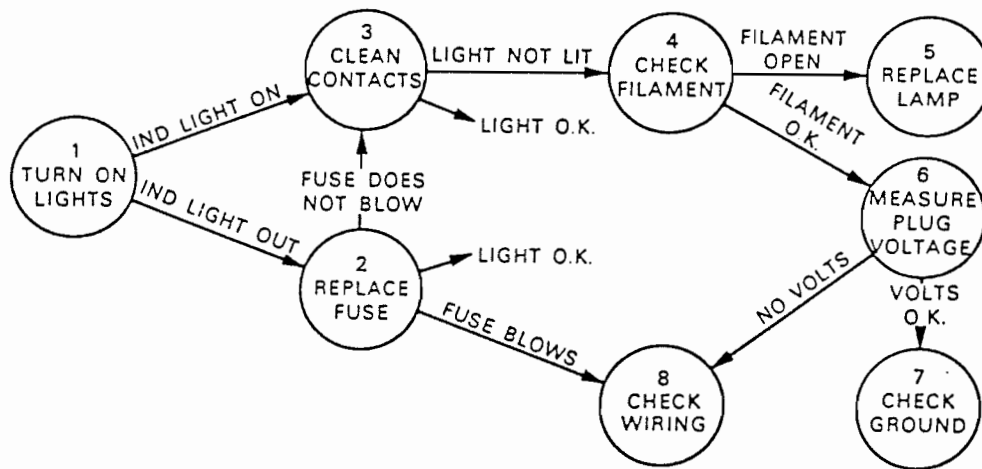
S372

EXTERIOR LIGHTS

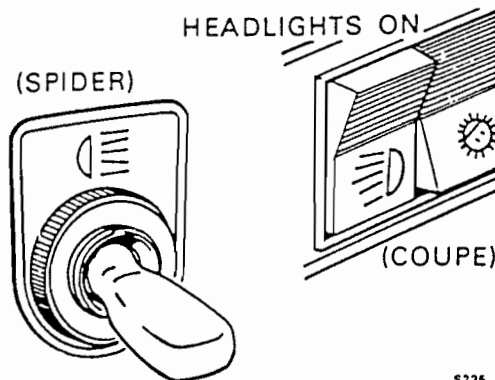
TABLE OF CONTENTS

SECTION	PAGE
● LEFT OR RIGHT HIGH BEAMS WON'T WORK	55
● LEFT OR RIGHT LOW BEAMS WON'T WORK	60
● FOG LAMPS WILL NOT WORK (Coupe Only)	67
● PARKING LIGHTS AND SIDE MARKER LIGHTS DO NOT WORK/PARKING LIGHT INDICATOR OUT	71
● BRAKE LIGHTS WON'T WORK	80
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● LICENCE PLATE LIGHT NOT LIT	84
● VEHICLE WARNING LIGHTS DO NOT FLASH	86
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EXTERIOR LIGHTS LEFT OR RIGHT HIGHBEAMS WON'T WORK

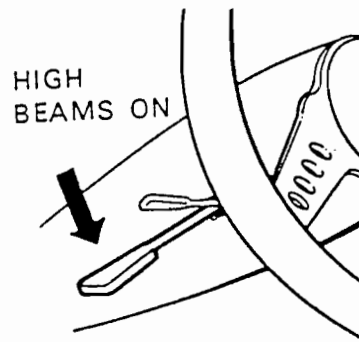


1.a. Turn on headlights.



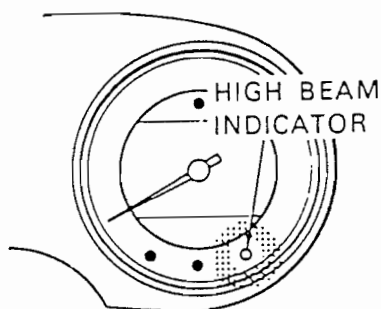
S235

b. Turn on high beams.



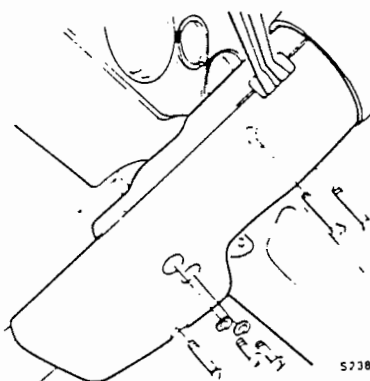
S236

- c. See if either high beam or indicator is lit.



S211

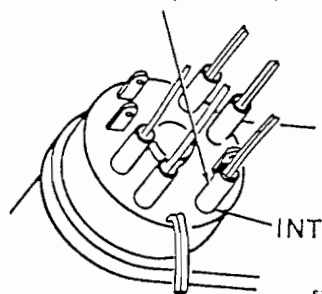
- d. If both high beams are not lit, remove cover from bottom of steering column.



S238

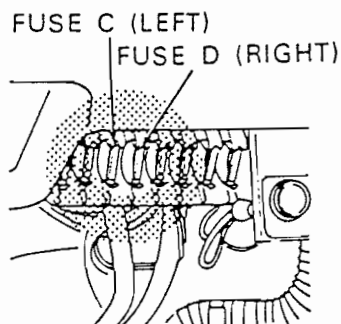
GRAY/BLACK (SPIDER)
BLACK (COUPE)

- e. Check connection of grey/black wire to ignition switch terminal.
- f. If connection is good, go to step 2. If not, clean and reconnect.



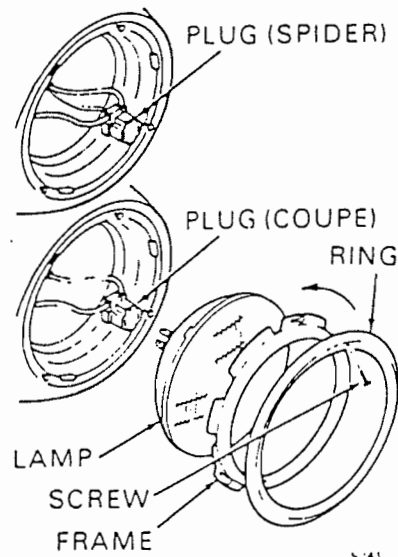
S274

- 2.a. Turn light switches off.
- b. Check fuse C if left highbeam only was not lit or fuse D if right highbeam was not lit.
- c. Replace either fuse, if blown. If not, go to step 3.
- d. Turn on headlight and highbeam switch.
If lights are lit, job is complete.
If lights do not light, go to step 3.



S240

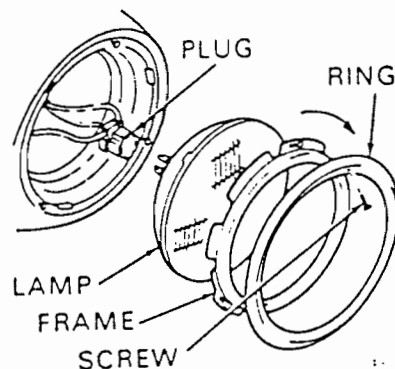
- 3.a. Turn off light switches.
- b. Remove ring from headlamp that would not light.
- c. Loosen three screws holding frame to fender.
- d. Turn frame to left. Remove frame.
- e. Carefully disconnect plug from lamp.



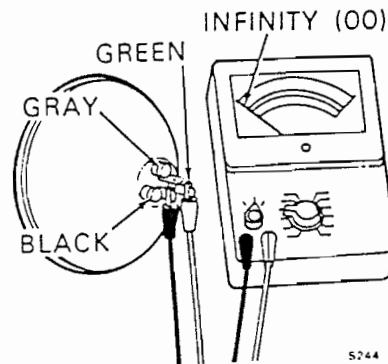
- f. If plug or lamp contacts are dirty or corroded, clean to a bright condition.
- g. Connect plug to lamp and turn on lights.



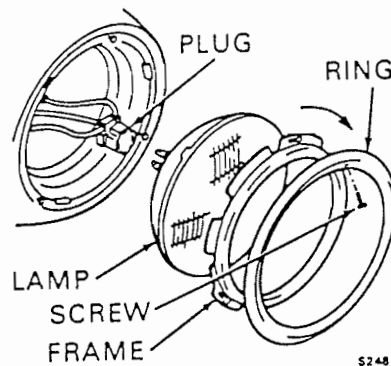
- h. If lamp does not light, go to step 4.
- i. If lamp is lit, turn off lights. Place frame on three screws and rotate to right. Tighten screws. Attach ring to fender.



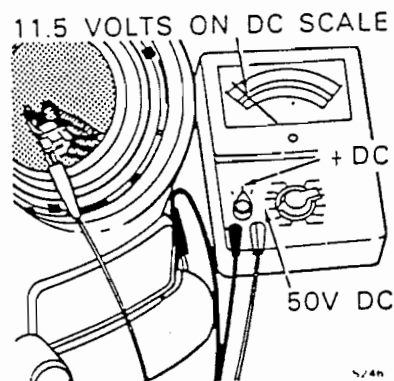
- 4.a. Get ohmmeter.
- b. Set meter to measure low resistance. Plug need not be removed.
- c. Connect meter to lamp.
- d. If meter indicates infinity (∞), go to step 5. If meter indicates continuity, go to step 6.



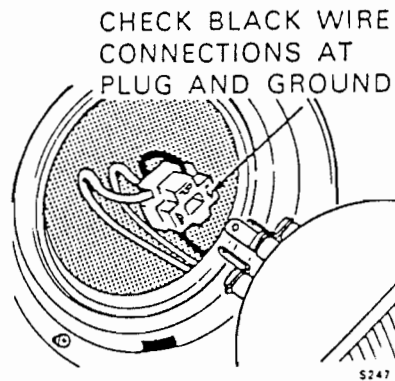
- 5.a. Get new lamp.
- b. Connect plug to lamp.
- c. Position lamp in fender.
- d. Place frame on three screws. Rotate frame to right. Tighten screws.
- e. Attach ring to fender. Install screw.
- f. Check lights. Job complete.



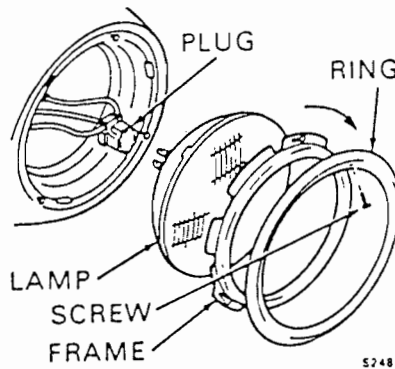
- 6.a. Set meter controls to measure 12 volts dc.
- b. Insert red lead in plug socket connected to green wire. Connect black lead to clean spot on bumper.
- c. Turn on lights. If meter indicates 10 to 13 volts, ground circuit open. Go to step 7. If meter indicates 0 volts, green wire to fuse panel open. Go to step 8.



- 7.a. Check black wire connection to plug. If broken, repair.
- b. Check black wire connection to body. Clean connection to body. Reconnect wire.
- c. Connect plug to lamp.

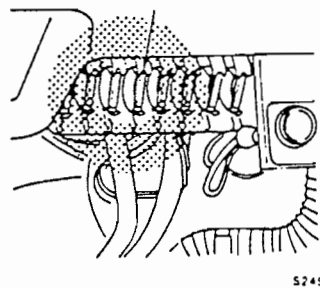


- d. Position lamp in fender.
- e. Position frame on three screws. Rotate frame to right and tighten screws. Check lights.
- f. Attach ring to fender. Install screw. Job complete.

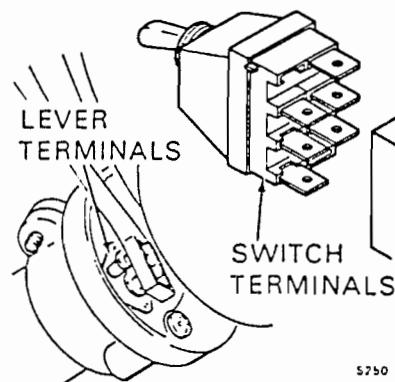


- 8.a. Check green wire between plug and fuse panel for breaks or bare wire rubbing on frame. Carefully check areas where wires are close to frame or run thru firewall. Check that all connections are tight. On crash damaged cars, carefully check wires in damaged areas.
- b. Splice or replace broken wires. Tape over defective insulation.

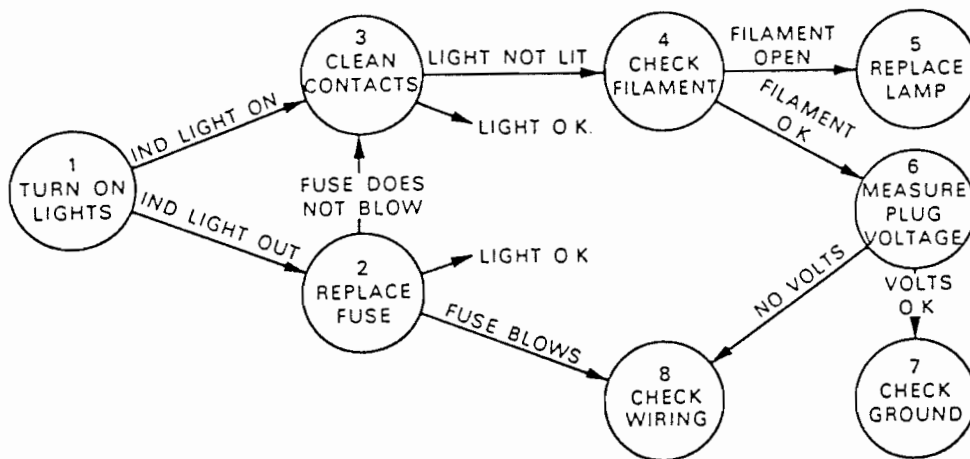
FUSE PANEL (UNDER DASH)
FUSES C AND D (8 AMP)



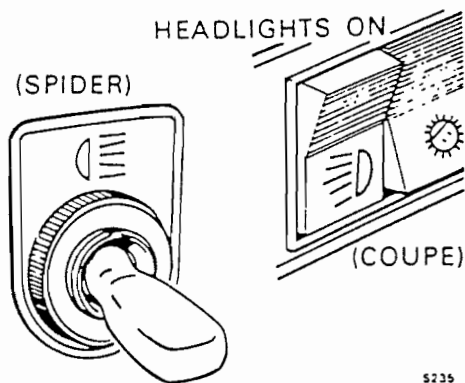
- c. If check shows wiring to panel is good, check connections at light switch.



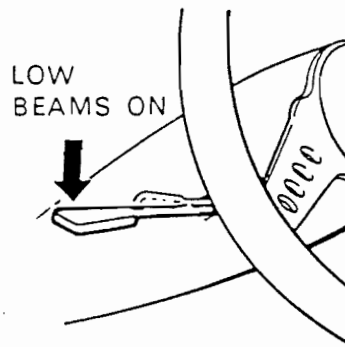
LEFT OR RIGHT LOW BEAMS WON'T WORK



1.a. Turn on headlights.

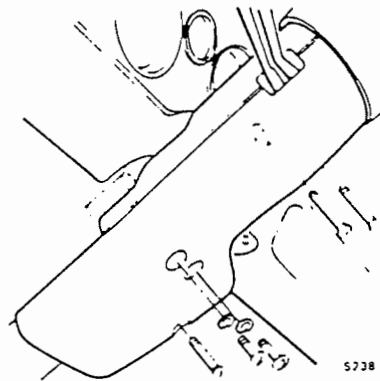


b. Turn on low beams.



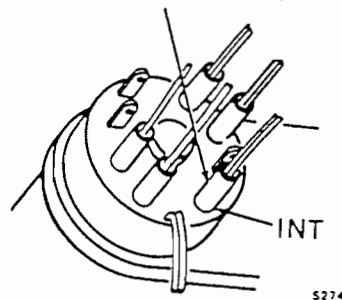
c. See if either low beam is lit.

d. If both low beams are not lit, remove cover from bottom of steering column. (Spider only).

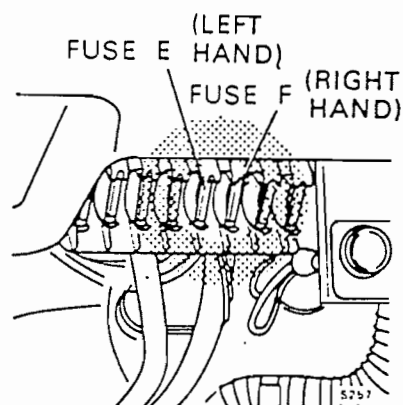


e. Check connection of grey/black or black wire to ignition switch terminal.
f. If connection is good, go to step 2. If not, clean and reconnect.

GRAY/BLACK (SPIDER)
BLACK (COUPE)

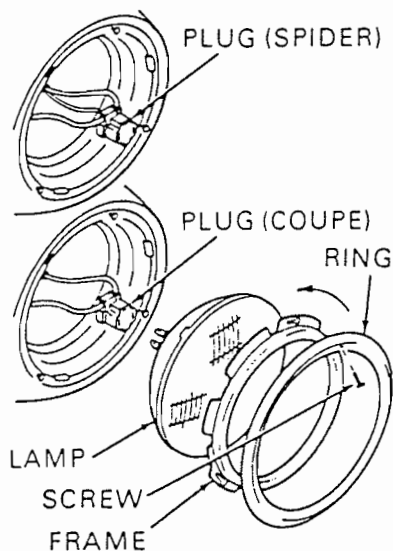


2.a. Turn light switches off.
b. Check fuse E if left low beam only was not lit or fuse F if right low beam was not lit.
c. Replace either fuse, if blown. If not, go to step 3.



- d. Turn on headlight and low beam switch.
If lights are lit, job is complete.
If lights do not light, go to step 3.

- 3.a. Turn off light switches.
- b. Remove ring from headlamp that would not light.
- c. Loosen three screws holding frame to fender.
- d. Turn frame to left. Remove frame.
- e. Carefully disconnect plug from lamp.



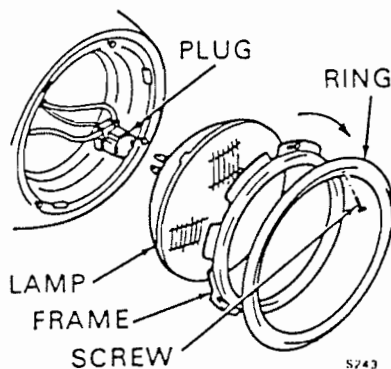
S241

- f. If plug or lamp contacts are dirty or corroded, clean to a bright condition.
- g. Connect plug to lamp and turn on lights.



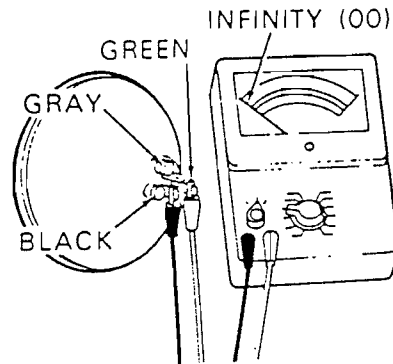
S242

- h. If lamp does not light, go to step 4.
- i. If lamp is lit, turn off lights.
Place frame on three screws and rotate to right. Tighten screws.
Attach ring to fender.

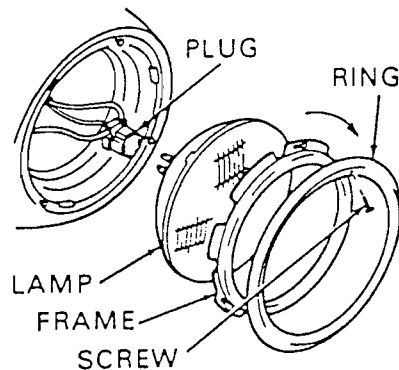


S243

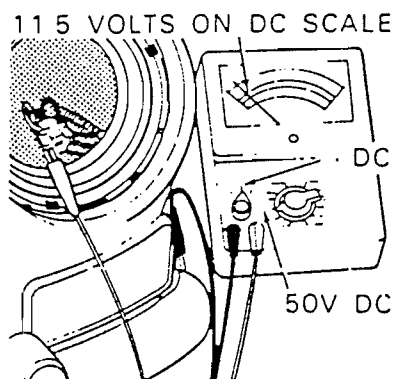
- 4.a. Get ohmmeter.
- b. Set meter to measure low resistance. Plug need not be removed.
- c. Connect meter to lamp.
- d. If meter indicates infinity (∞), go to step 5. If meter indicates continuity, go to step 6.



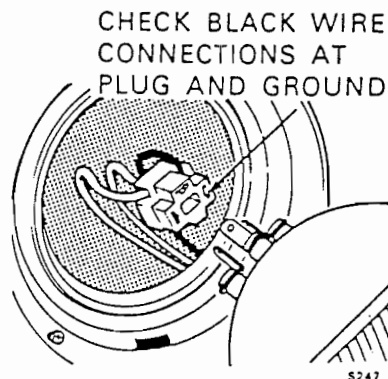
- 5.a. Get new lamp.
- b. Connect plug to lamp.
- c. Position lamp in fender.
- d. Place frame on three screws. Rotate frame to right. Tighten screws.
- e. Attach ring to fender. Install screw.
- f. Check lights. Job complete.



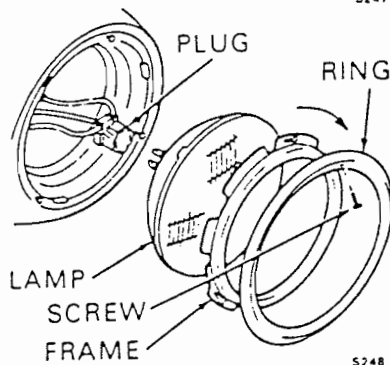
- 6.a. Set voltmeter controls to measure 12 volts dc.
- b. Connect red lead to plug socket connected to grey wire. Connect black lead to clean spot on bumper.
- c. Turn on lights. If meter indicates 10 to 13 volts, ground circuit open. Go to step 7. If meter indicates 0 volts, grey wire to fuse panel open. Go to step 8.



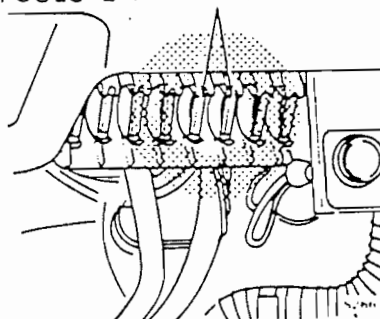
- 7.a. Check black wire connection to plug. If broken, repair.
- b. Check black wire connection to body. Clean connection to body. Reconnect wire.
- c. Connect plug to lamp.



- d. Position lamp in fender.
- e. Position frame on three screws. Rotate frame to right and tighten screws. Check lights.
- f. Attach ring to fender. Install screw. Job complete.

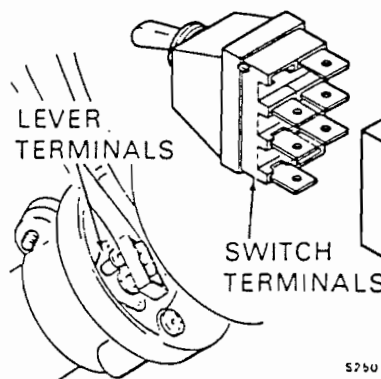


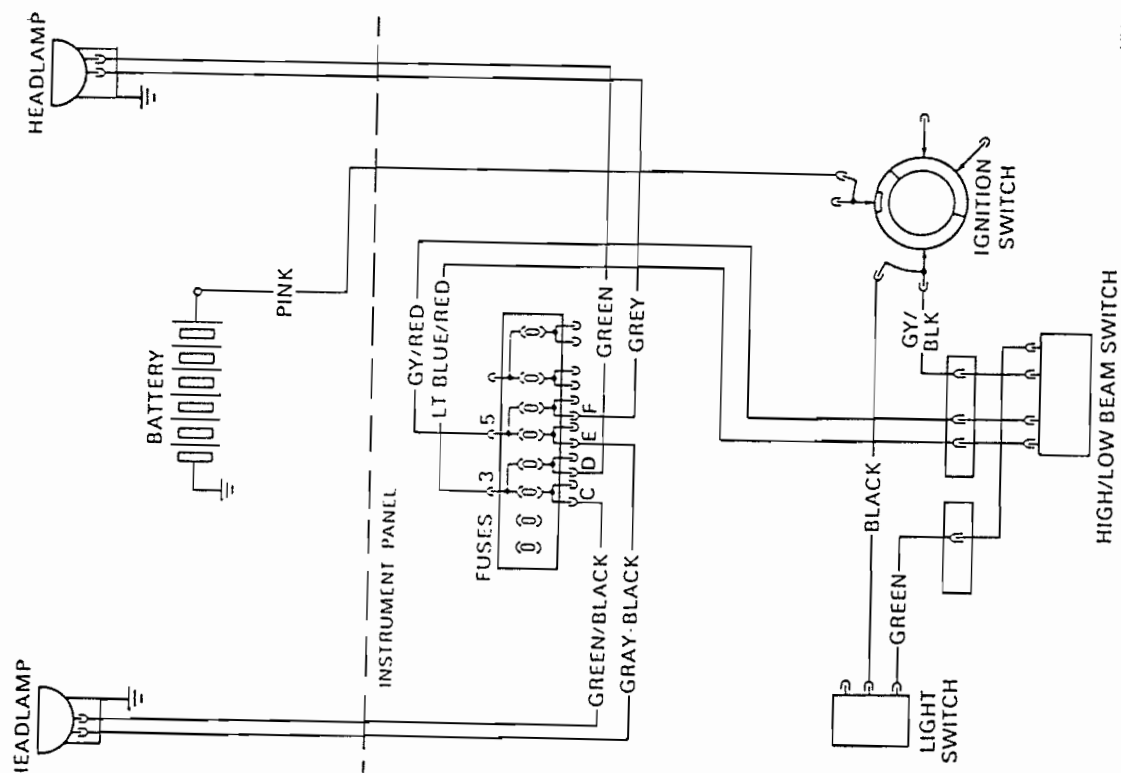
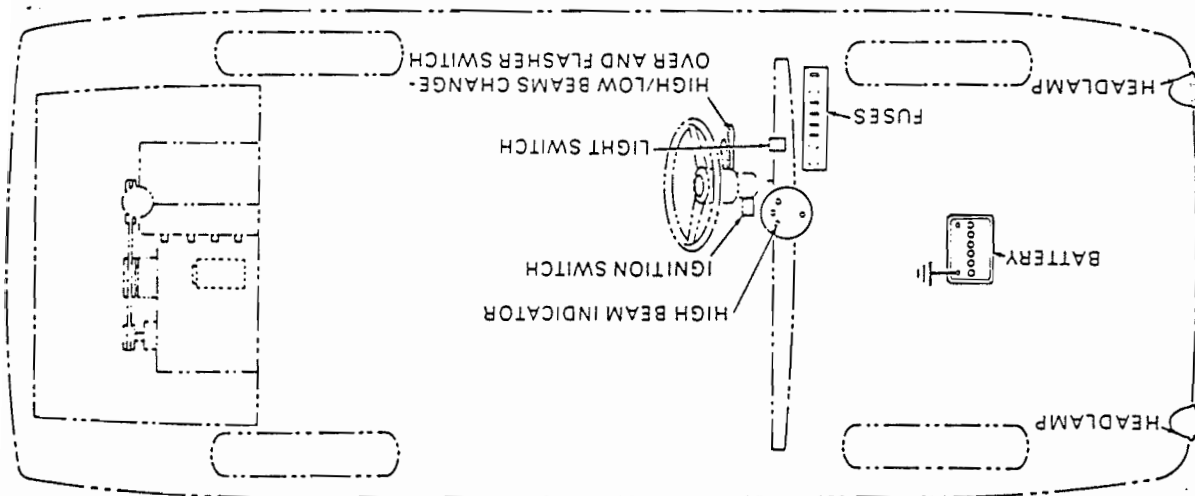
FUSE PANEL (UNDER DASH)
FUSES E AND F (8 AMP)



- 8.a. Check grey wire between plug and fuse panel for breaks or bare wire rubbing on frame. Carefully check areas where wires are close to frame or run thru fire-wall. Check that all connections are tight. On crash damaged cars, carefully check wires in damaged areas.

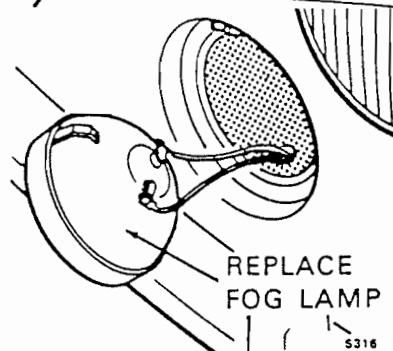
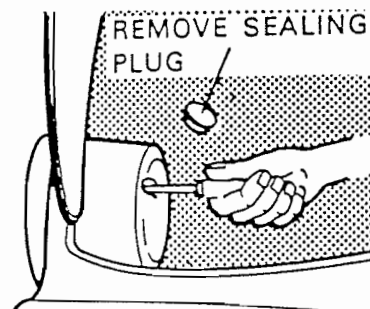
- c. If check shows wiring to panel is good, check connections at light control switches.



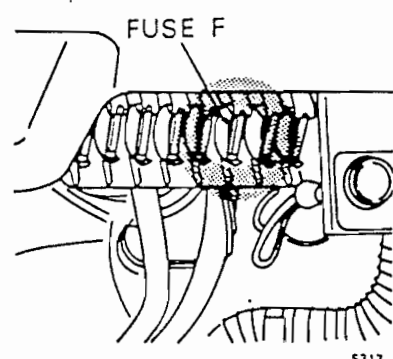


FOG LAMPS WILL NOT WORK (Coupe Only)

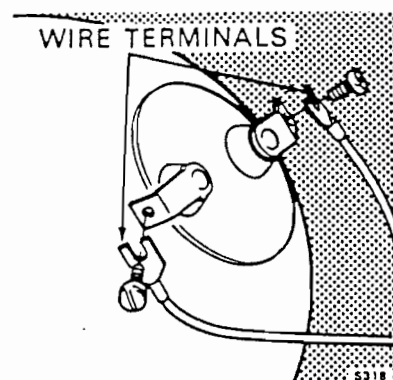
- 1.a. If only one lamp will not light, replace that lamp with a new one and check.



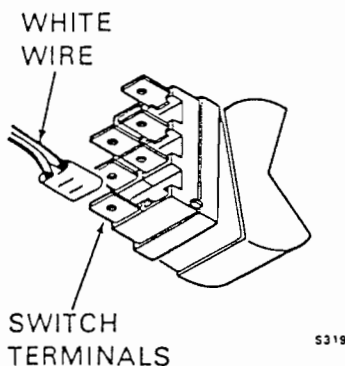
- b. If lamp is O.K., check fuse.



- c. If blown, replace and check lamps.
- d. If fuse is O.K., check wire terminals for dirty or improper connection at the foglamps. Clean, repair, or replace.

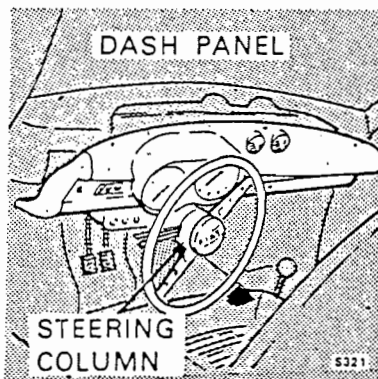


- e. If both lamps will not light, check connections and condition of white wire from terminal 6 of fuse block to lower terminal of foglamp switch.

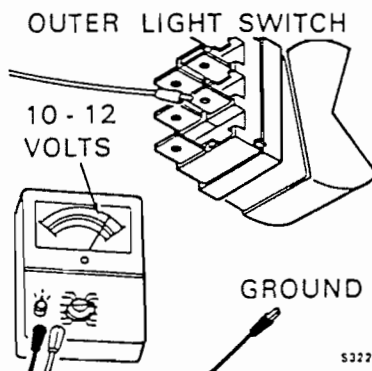


Check condition and connections of blue wire from foglamp switch to fuse.

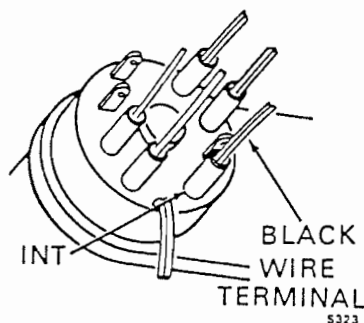
- f. If any connections are not O.K. or wires are broken, repair or replace and check lights. If O.K. go to step 2.
- 2.a. Drop steering column and remove dash panel.



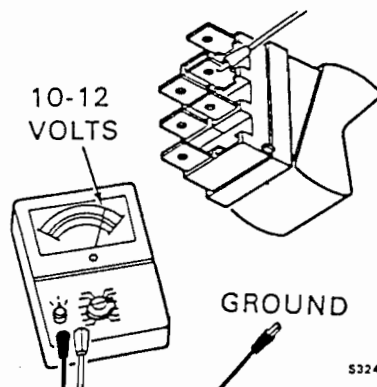
- b. Connect meter leads to outer lighting switch terminal and ground. If voltage is read, go to step 3.



If no voltage is read, check green wire for breaks back to headlamp switch terminal 30 and black wire back to ignition switch.



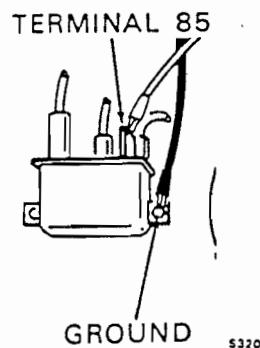
- 3.a. Connect meter leads to outer lighting switch as shown.
- b. Turn switch on.
- c. If voltage is read, switch is O.K. If not, go to step 4.

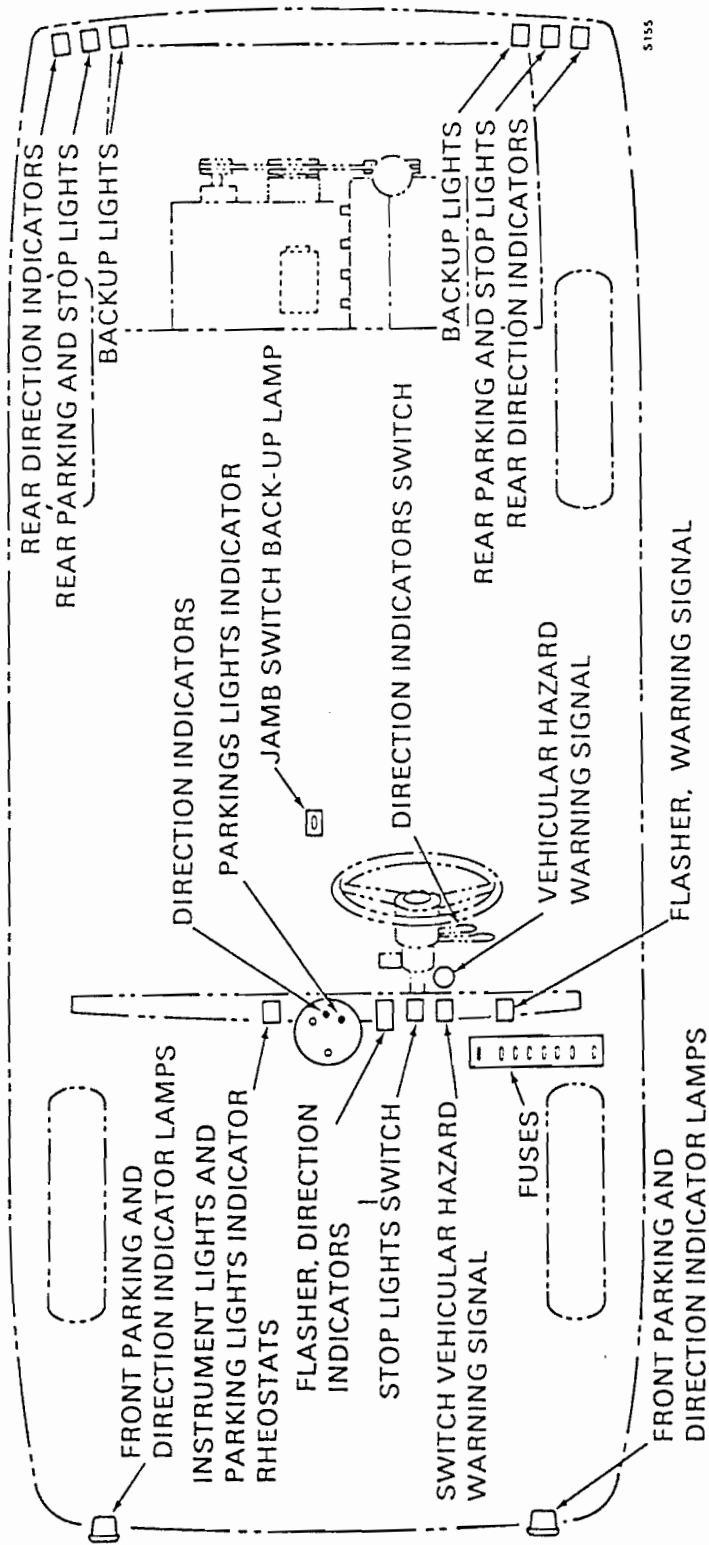


- 4.a. Check connection and condition of grey/red wire from high/low beam change-over headlamp switch at terminal 5 of fuse E. Clean, repair or replace.
- b. If connections and wire are good, replace outer lighting switch. If not, repair or replace.

NOTE

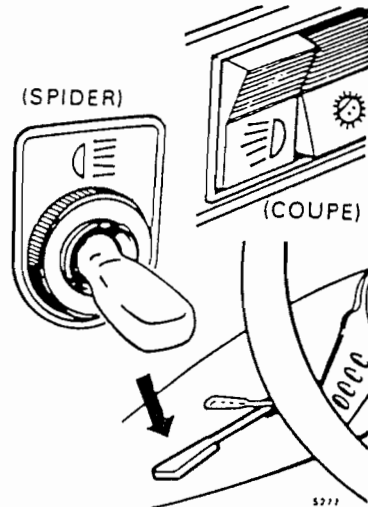
Connections to the high/low beam change-over switch in the steering column could be defective; however, steering wheel removal will be necessary to gain access.



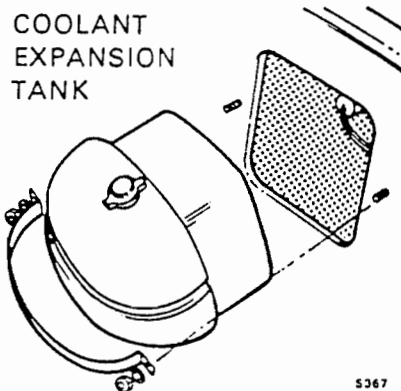
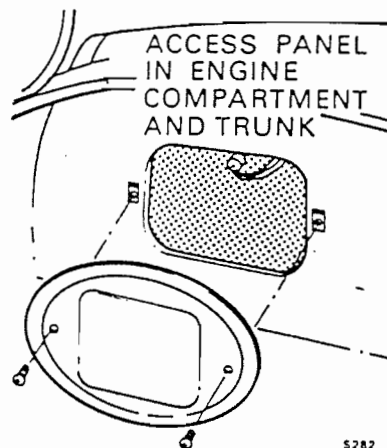


PARKING LIGHTS AND SIDE MARKER LIGHTS DO NOT WORK/PARKING LIGHT INDICATOR OUT

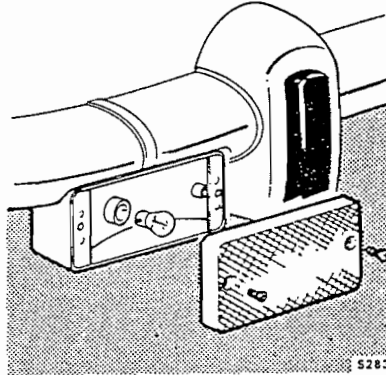
- 1.a. Turn headlights on.
If head lights are out, go to step 5.
If headlights are on, go to step 2.
- 2.a. Place light switch lever in park position.
- b. Look at park lights, side marker lights, and park light indicator.
- c. If only one light is out, replace bulb.



(Spider only.) The two front and left rear side marker bulbs can be reached by removing access panels. The right rear side marker bulb can be reached by removing the expansion tank.

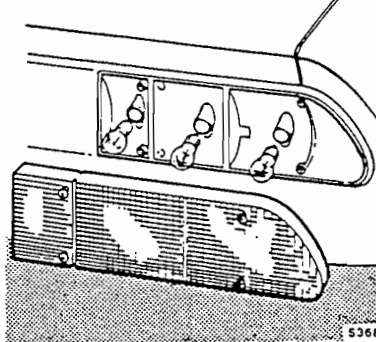


COUPE AND SPIDER FRONT PARKING LIGHTS

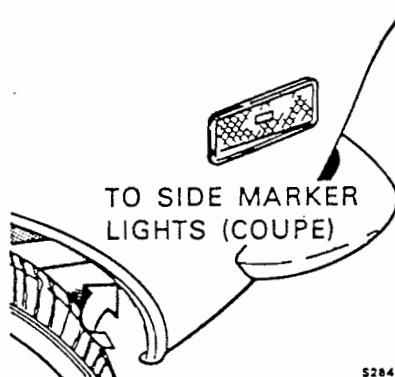


Front park light bulbs can be reached by removing lens screws. Rear park light bulbs can be reached by removing lens screws in both the red and clear lenses.

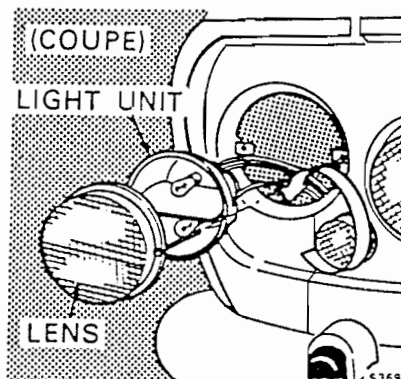
SPIDER REAR LIGHTS



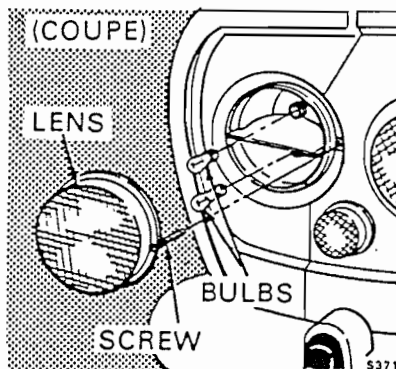
(Coupe only.) The front side marked light bulbs can be reached from inside the wheel well.



The two rear side light bulbs can be reached by removing the rear park lenses and pulling the rear park lights out.

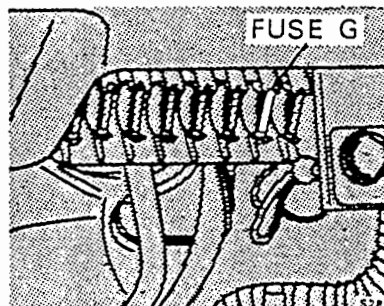


Both front and rear park light bulbs can be reached by removing the lenses.

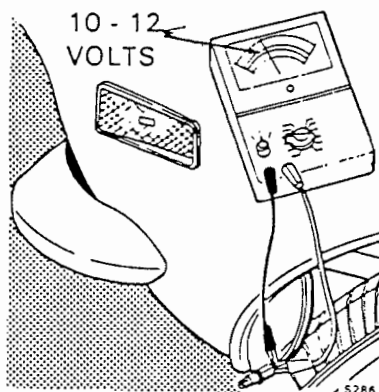


If light remains out after bulb is replaced, go to step 3 or 4 depending on location.

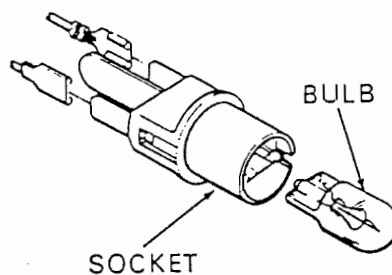
- d. If left front and/or right rear are out, go to step 3.
 - e. If right front and/or left rear are out, go to step 4.
 - f. If all lights are out, go to step 5.
 9. If park light only is out, go to step 6.
- 3.a. Check fuse G.
Replace fuse if blown.



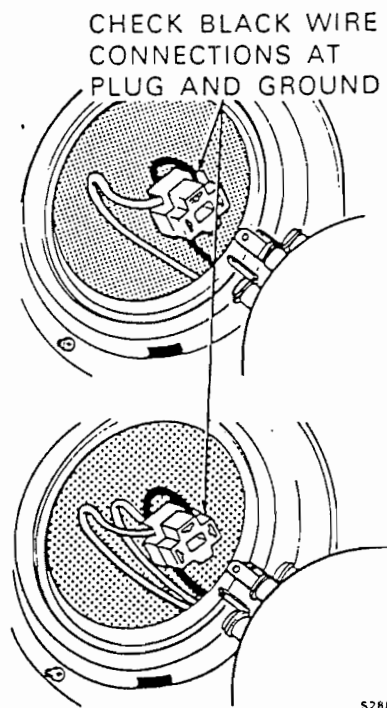
- b. If fuse is not blown, place meter across terminals of left front side light as shown. 12 volts should be read.
- c. If voltage is not read, check wiring.



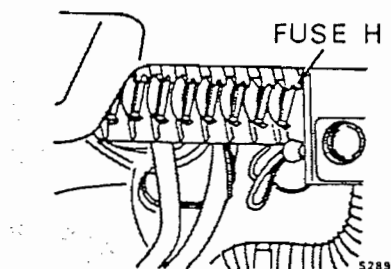
- d. If voltage is read, check bulb socket for corrosion, loose connections, grounding.



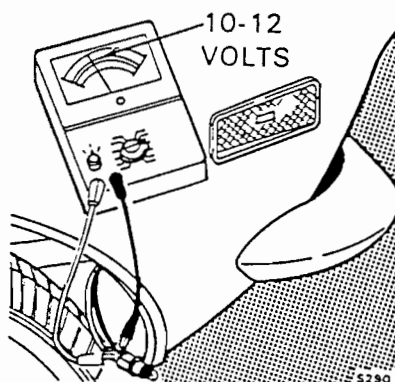
- e. Check ground wire at headlight.
- f. Repeat step 3.b. at left front park light, right rear side light, and right rear park light.
- g. See if parking light indicator is still out.
If indicator is still out, go to step 6.



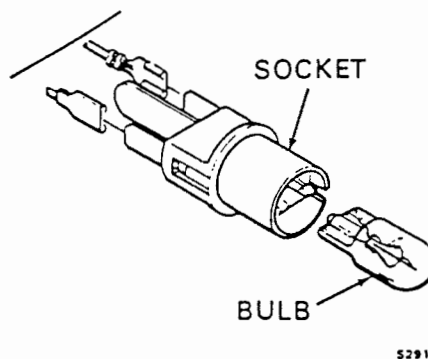
- 4.a. Check fuse H.
- b. Replace fuse if blown.



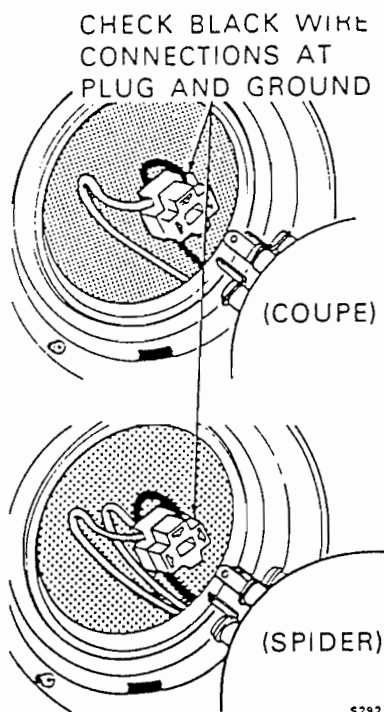
- c. If fuse is not blown, place meter across terminals of right front side light as shown. 12 volts should be read.
- d. If voltage is not read, check wiring.



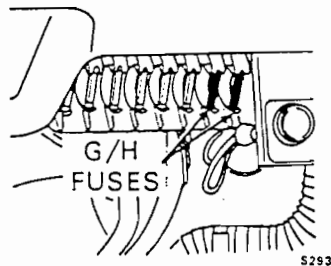
- e. If voltage is read, check bulb socket for corrosion, loose connections, grounding.



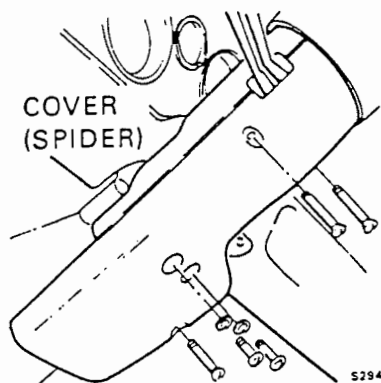
- f. Repeat step 4.b. at left front park light, right rear side light, and right rear park light.
- g. Check ground wire at headlights.



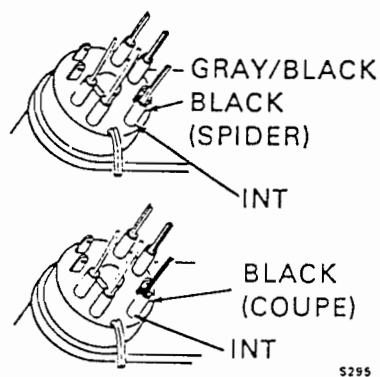
- 5.a. Check fuses G and H. Replace fuses, if blown.



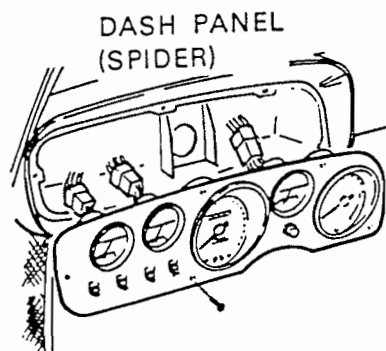
- b. If lights stay out, remove bottom half of steering column housing (Spider only).



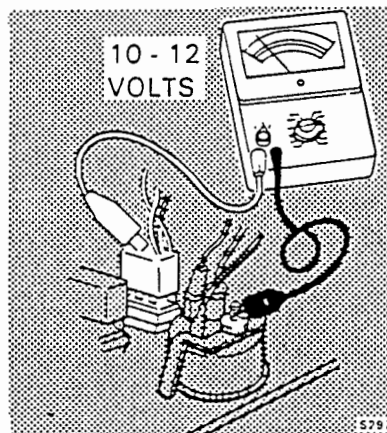
- c. Check that grey/black and black wires are attached to ignition switch terminal.



- d. If light does not come on, remove dash panel (Spider only), drop steering wheel and dash (Coupe only).

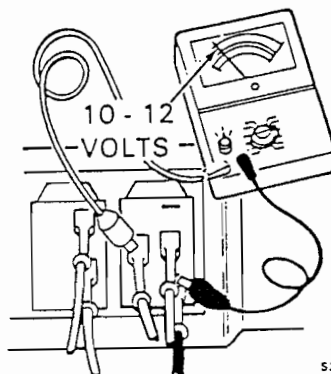


- e. (Spider only) Place red meter probe on either bottom terminal of light switch.



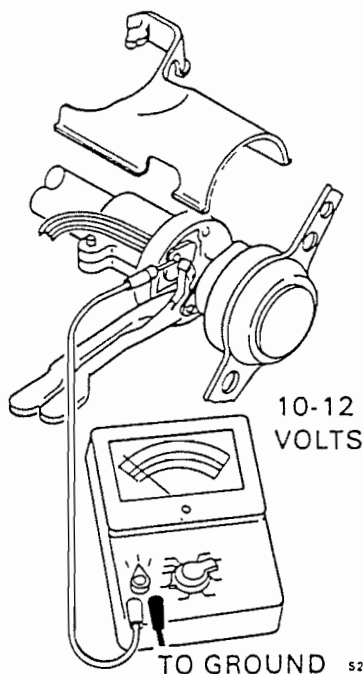
(Coupe only) place red meter probe on top terminal of light switch. Place black probe to ground. 12 volts should be read when switch is turned on.

- f. If 12 volts are not read, replace the switch.



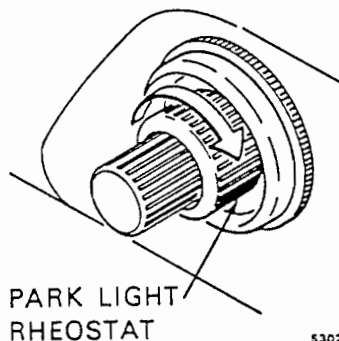
S298

- g. If lights do not come on, (Spider only) lift top half of steering column housing to expose light switch lever contacts. Contact to be tested can be seen through lever hole in Coupe steering column housing.
- h. Place light switch lever in high beam position.
- i. Place black meter lead to ground and touch red lead to park contact as shown. 12 volts should be read.
- j. If 12 volts are not read, check wiring.
- k. If 12 volts are read, clean switch contacts.
- l. If lights still do not work, replace light switch lever switch assembly.



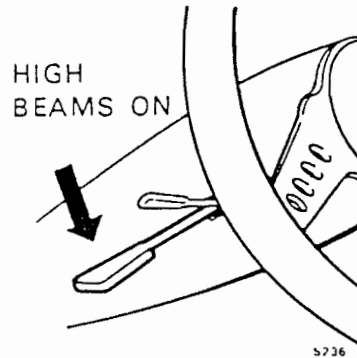
S299

- 6.a. (Spider only) turn outer rim of rheostat to see if park light is turned off.
- b. If light does not come on, remove park light indicator and replace bulb.

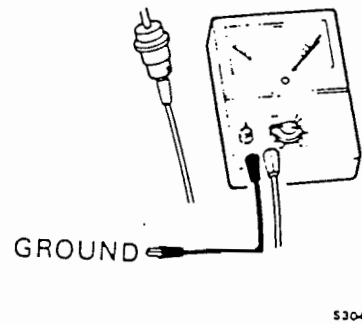


S302

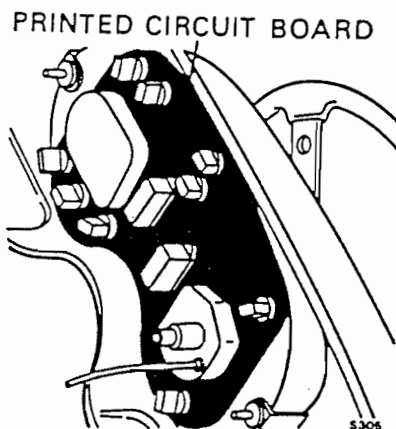
- c. (Spider only) check circuit by grounding bulb and socket.
- d. (Spider only) if light does not come on, turn headlight switch off and place light switch lever in high beam position.



- e. (Spider only) remove bulb from socket and connect meter as shown. Be sure red lead touches bottom of bulb socket. Connect black lead to ground.
- f. (Spider only) turn outer rim of control full left and full right. Meter should read 1 ohm or less at full right. Meter should read 60-70 ohms at full left.
- g. If reading is much more than 1-70 ohms through full turn, or goes to infinity (∞), replace rheostat.



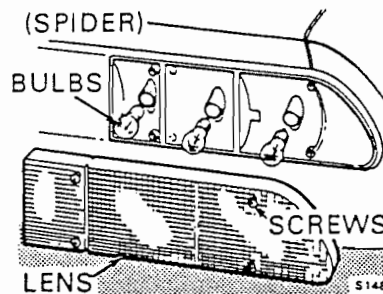
- h. (Coupe only) if light does not come on, check for cracked printed circuit board.



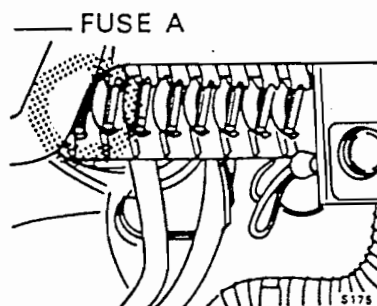
BRAKE LIGHTS WON'T WORK

1.a. If both brake lights won't work, go to step 3. If only one light won't work, go to step 2.

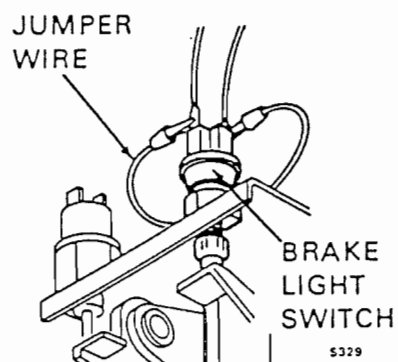
- 2.a. Remove red lens from light that won't work.
- b. Remove bulb. Check that brass terminal inside socket and wall of socket is bright and shiny. If not clean them.
- c. Insert new bulb. If light works, job complete. If light don't work, check red wire connection to socket. Check red wire connection to opposite light.



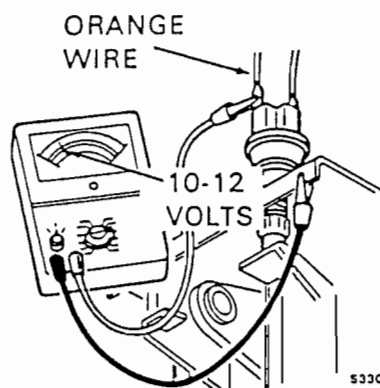
3.a. Check fuse A. If blown, replace it. If not blown, go to step b.



- b. Go to brake light switch mounted above brake pedal. Connect jumper wire between orange and red wire on switch. Turn on ignition switch. If brake lights work, replace brake light switch.



- c. If lights don't work, connect volt-meter red lead to orange wire on brake switch. Connect black lead of meter to ground. Turn on ignition switch. If meter indicates 10 to 12 volts, red wire to brake lights broken.
- d. If meter does not indicate 10 to 12 volts, orange wire to fuse broken.



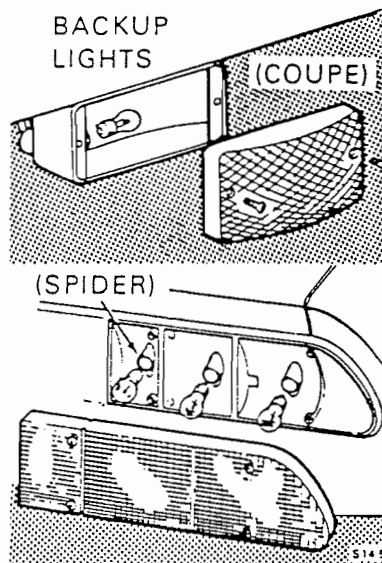
BACK-UP LIGHTS WON'T WORK

1.a. If only one light won't work, go to step 2. If both lights won't work, go to step 3.

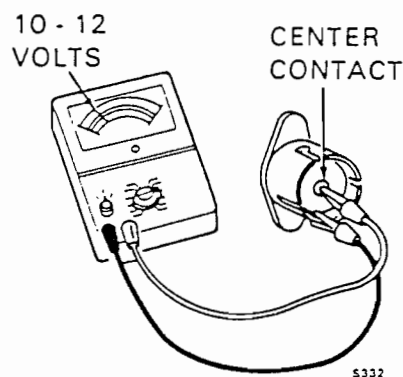
2.a. Remove lens of lamp that won't work.

b. Remove bulb. With gear shift in neutral, clean brass contacts in socket to a bright finish.

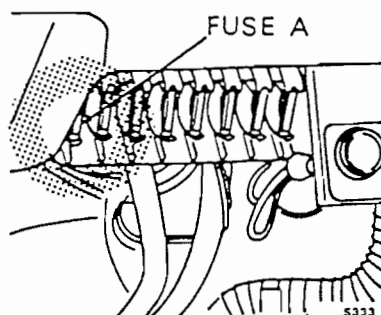
c. Install new bulb. Turn on lights. If light comes on, replace lens. Job complete.



d. If light won't come on, remove bulb. Get meter or test light. Check for 10 to 12 volts on center contact of socket. If volts on center contacts, replace socket. If no volts, check white wire to opposite backup lamp.



3.a. Check fuse A. If blown replace it. If not blown, go to step b.

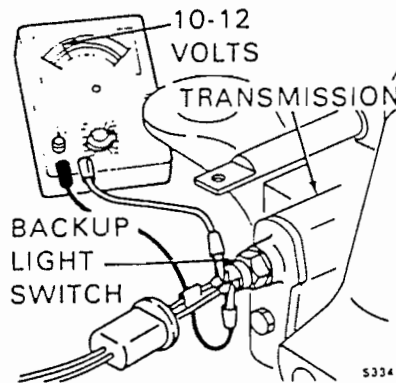


- b. Jack right side of car. Get meter. Find backup light switch on front of transmission.

NOTE

Backup light switch has orange and white wires connected to it.

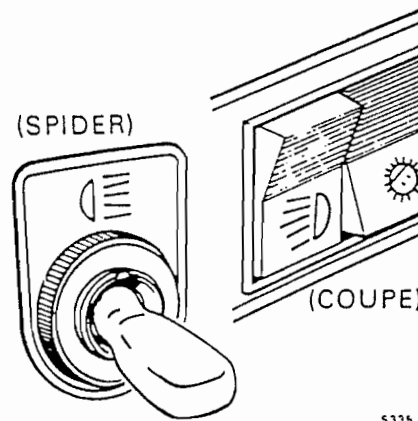
- c. Connect meter red lead to orange wire terminal. Connect black meter lead to white wire terminal. Turn on ignition switch. With gearshift in neutral, meter should indicate 10 to 12 volts. If meter indicates volts, go to step e.



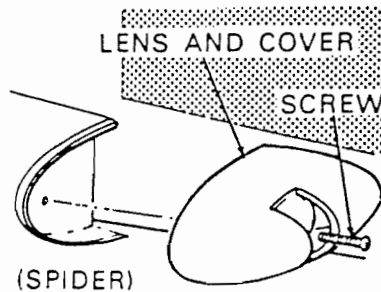
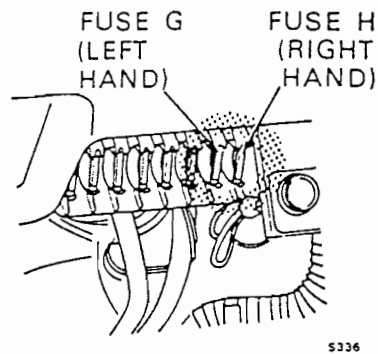
- d. If meter does not indicate volts, touch black meter lead to clean unpainted spot on frame. If meter now indicates volts, check white wire to backup lights. If meter does not indicate volts, check orange wire to fuse panel.
- e. Place gearshift in reverse. Meter should drop to 0. If meter does not drop to 0, replace switch.

LICENSE PLATE LIGHT NOT LIT

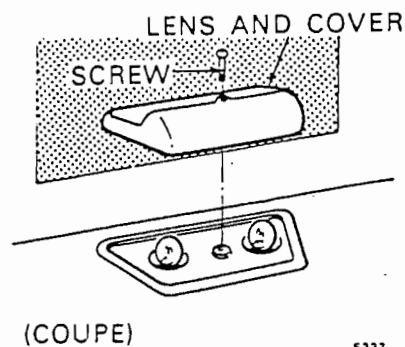
- 1.a. Turn exterior light switch on.
- b. If left or right hand light is out, check to see if the parking lights are on.



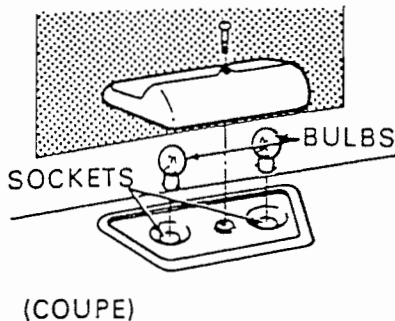
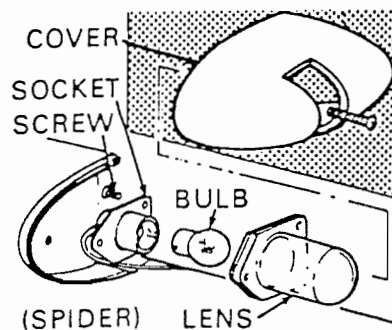
- c. If not, check fuse G for left hand and H for right hand bulb. If blown, replace.
- d. If they are on, go to step 2.



- 2.a. Remove the license plate lens.

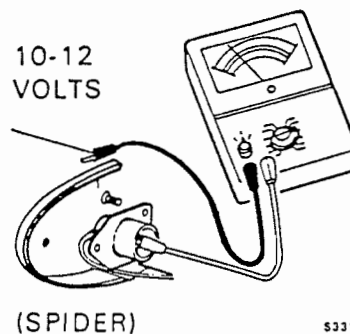


- b. Remove bulb that is not lit. Replace with new bulb.
 - c. If bulb lights, job complete.
 - d. Replace lens or cover.
 - e. If not, go to step 3.
- 3.a Check bulb socket and bulb bayonet for dirt and corrosion. Clean both to a bright condition with switch off.
- b. Reinstall bulb. If lit, job complete.



S338

- c. If both were clean or light stays out after cleaning and reinstalling, go to step 4.
- 4.a. Connect meter to socket center contact and ground as shown.
- b. If voltage is read, replace bulb and check.

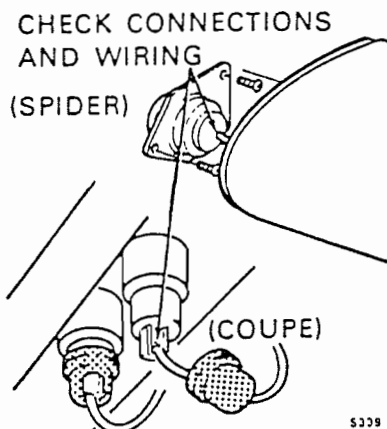


S331

- c. If no voltage is read, check wire connections and wiring.

NOTE

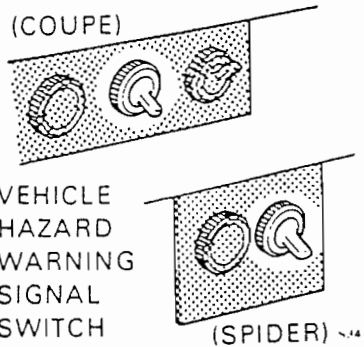
Crash damage could cause broken or bare wiring.



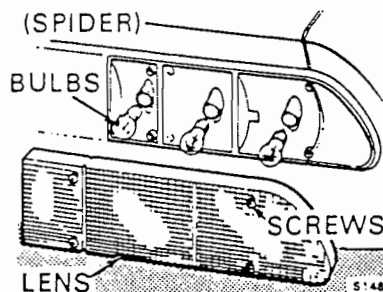
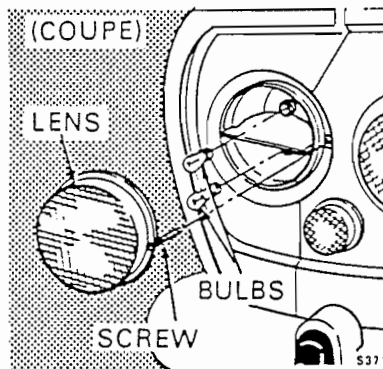
S339

VEHICLE WARNING LIGHTS DO NOT FLASH

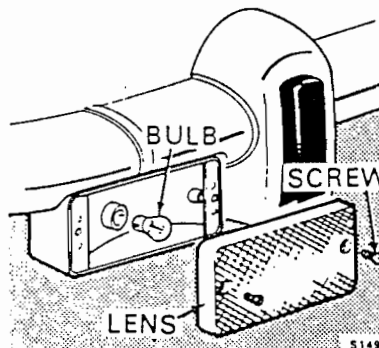
- 1.a. Turn vehicular hazard warning signal switch on.
- b. If any lights are flashing but one or more are not, go to step 2.
- c. If no lights are flashing, go to step 4.



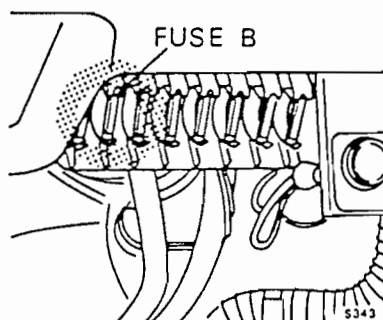
- 2.a. Remove light lens of light that is not flashing.
- b. Replace bulb. If flashing, job complete.
- c. If light does not flash on, go to step 3.



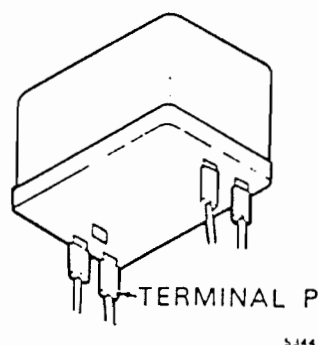
- 3.a. Check bulb socket and bayonet for dirt or corrosion. Clean to a bright condition with switch off.
- b. Reinstall bulb.
- c. Turn signal switch on. If flashing, job complete.
- d. If not, go to step 5.



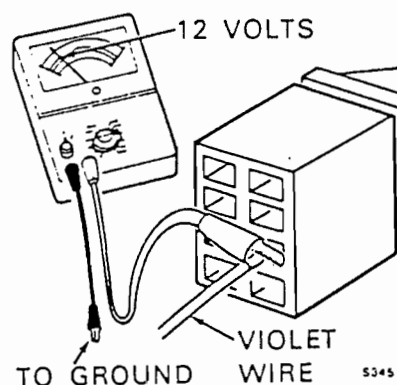
- 4.a. Check fuse B. If blown, replace.
- b. If fuse is O.K., go to step 5. Turn switch off.



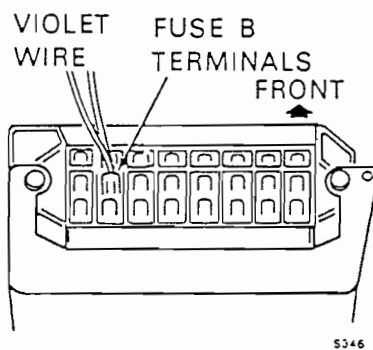
- 5.a. Check connections of wires to flasher. If O.K., replace with new flasher.
- b. Turn signal switch on.
- c. If lights flash, job complete.
- d. Turn off signal switch.
- e. If lights do not flash, reinstall old flasher and go to step 6.



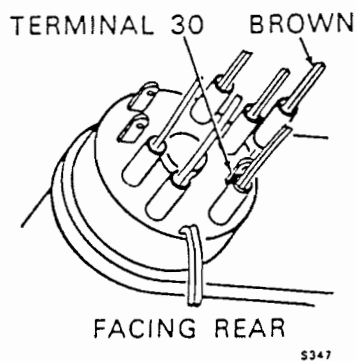
- 6.a. Connect a meter to the signal switch connector (violet wire in white connector) and ground as shown.
- b. If voltage is read, go to step 7.



- 7.a. Check red wire from flasher to signal switch. Repair or replace wire or connections.
- b. If no voltage is read, check violet wire from signal switch to fuse B. Repair or replace wire or connections.
- c. Reinstall connector, if removed.
- d. Turn switch on.
- e. If lights flash, job complete.
- f. If lights do not flash, go to step 8.

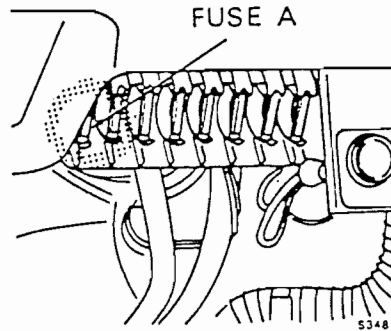


- 8.a. Check connection of brown wire from fuse B to terminal 30 of ignition switch.

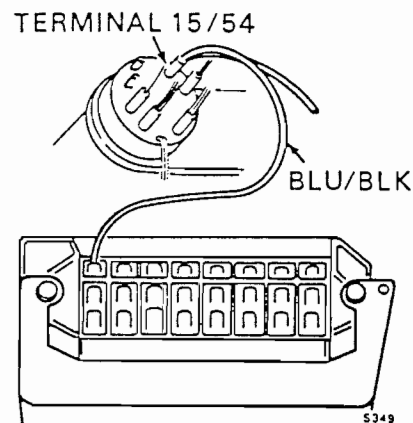


DIRECTIONAL LIGHTS NOT WORKING

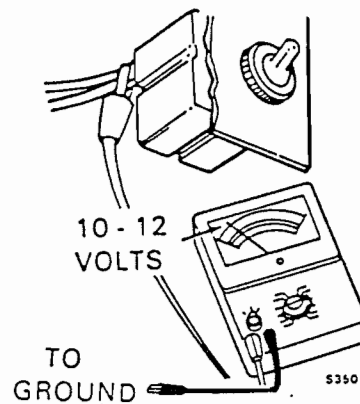
- 1.a. If none of the directional lights are working, check fuse A.
- b. If blown, replace.
- c. If fuse is good, go to step 2.
- d. If one or more directional lights do not work, go to step 6.



- 2.a. Check connection of blue/black wire at terminal 1 of fuse block and terminal 15/54 of the ignition switch. Check also the wire itself for breaks between the ignition switch and fuse panel.
- b. If any defect or poor connection is found, repair or replace.
- c. If connections and wire is O.K., go to step 3.

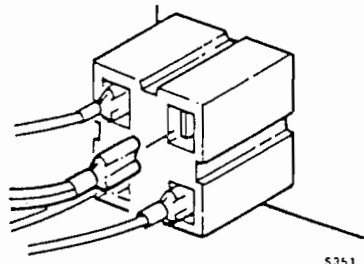


- 3.a. Connect a meter to the orange wire at the vehicular hazard warning signal switch connector and ground as shown.
- b. Turn ignition switch on.
- c. If voltage is read, go to step 5. If no voltage is read, go to step 4.
- d. Turn ignition switch off.



- 4.a. Check orange wire and connections from vehicle hazard signal switch to emergency hand brake light. Repair or replace poor connections or wire.

CHECK FOR
BROKEN WIRES OR
CONNECTIONS

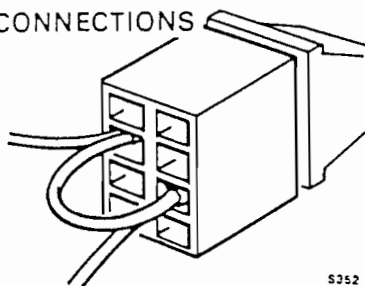


- b. Check also connections and condition of the orange wire from the emergency hand brake light to fuse A. Repair or replace poor connections or wires.

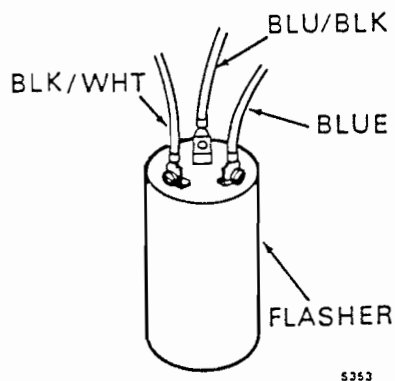
NOTE

On Spider model cars, the windshield wiper switch connections of the orange wire should be checked for proper connection and condition.

CHECK FOR
BROKEN
CONNECTIONS



- 5.a. Check the connections and condition of the blue/black wire from the vehicle hazard signal switch and flasher terminal (+ positive).
- b. Check also the connections of the white/black wire to the flasher.



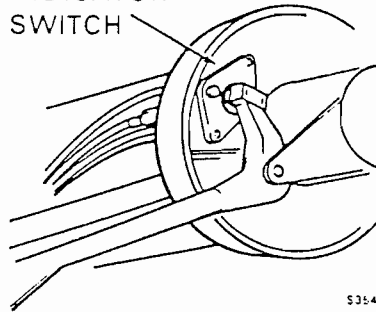
- c. If defect or poor connection is found, repair or replace and check operation.
- d. If none were found, problem could be at terminal L of steering column switch for directionals. Check, clean, or replace.

NOTE

On Coupe models access to the switch will require steering wheel removal.

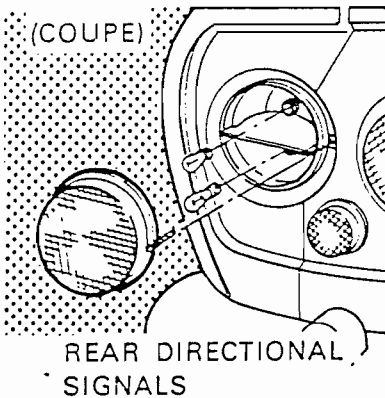
- 6.a. Remove the lens of the light not working and remove the bulb.
- b. Replace the bulb with a new one and check.

DIRECTIONAL
INDICATOR
SWITCH

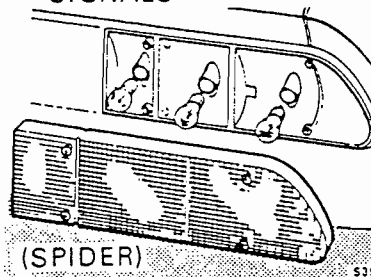


5354

(COUPE)



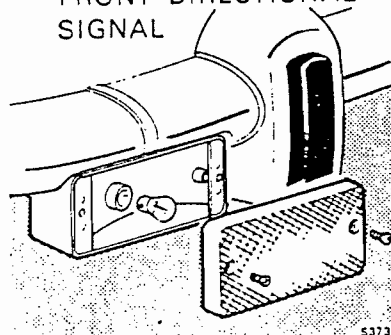
REAR DIRECTIONAL
SIGNALS



(SPIDER)

5355

FRONT DIRECTIONAL
SIGNAL



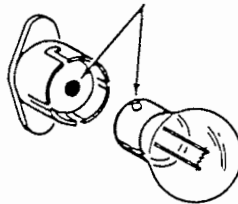
5373

- c. If bulb does not light, go to step 7.

If bulb lights, replace lens. Job complete.

- 7.a. Remove bulb.
- b. Check bulb socket and bulb for dirt or corrosion, clean to a bright condition.
- c. Reinstall bulb.
- d. If bulb lights, replace lens. Job complete.
- e. If bulb does not light, go to step 8.

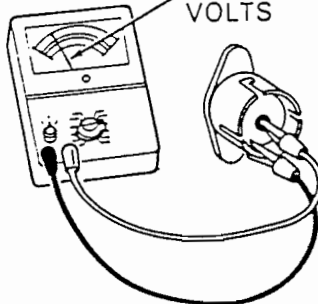
CHECK FOR DIRT
OR CORROSION



S356

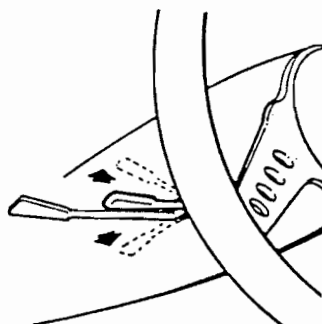
- 8.a. Remove bulb.
- b. Connect meter to bulb socket and ground as shown.

10 - 12
VOLTS

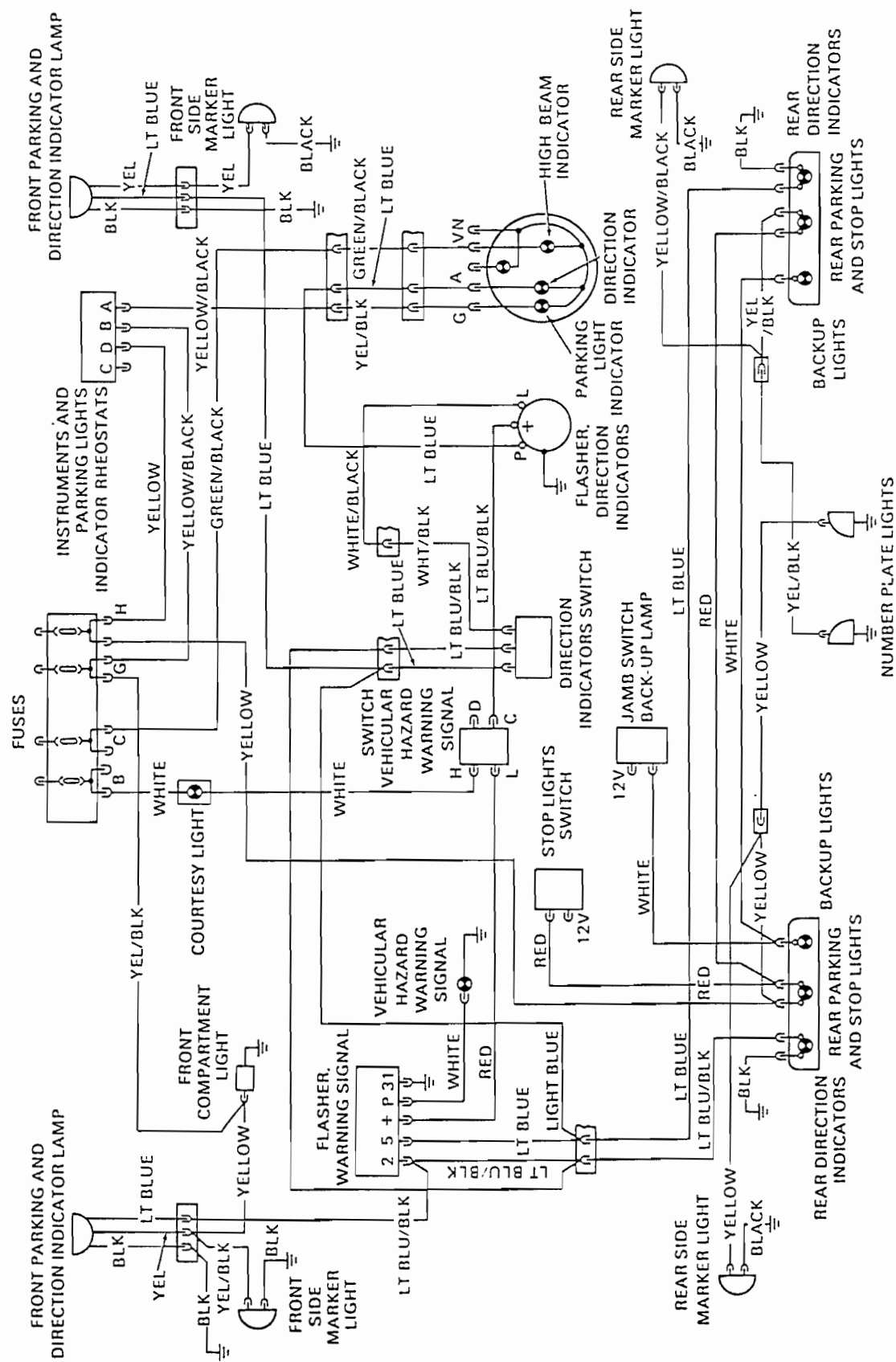


S357

- c. Turn ignition switch on.
- d. Place directional lights lever to left or right position as needed.
- e. If voltage is not read, check blue or blue/black wire from socket to connector and to switch on steering column for breaks or poor connections. (Especially at crash damaged or repaired areas.)

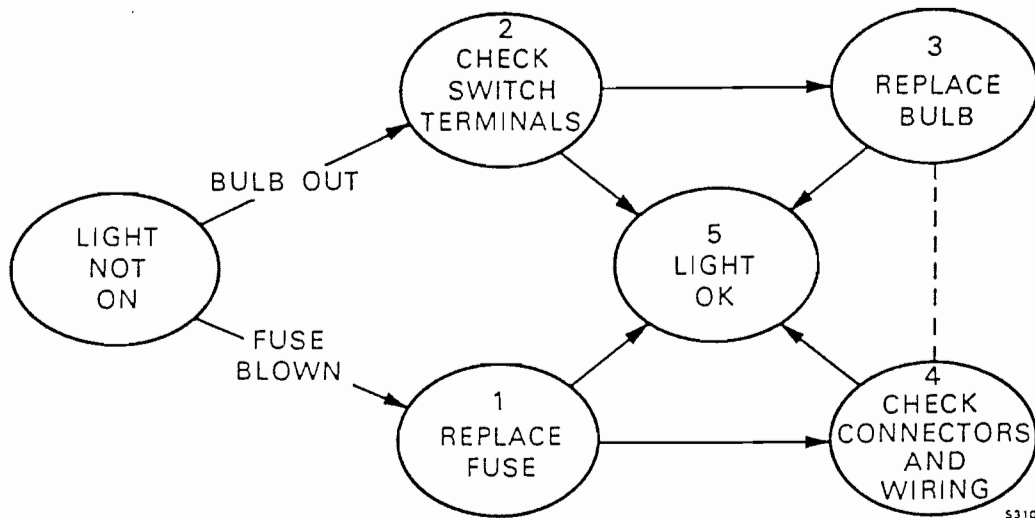


S358



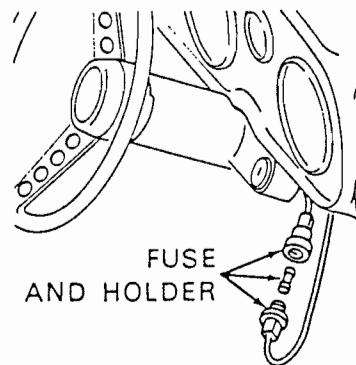
INTERIOR LIGHTS

KEY INDICATOR LIGHT WON'T WORK



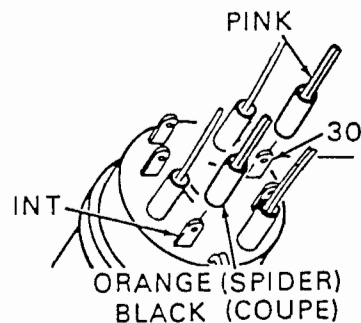
5310

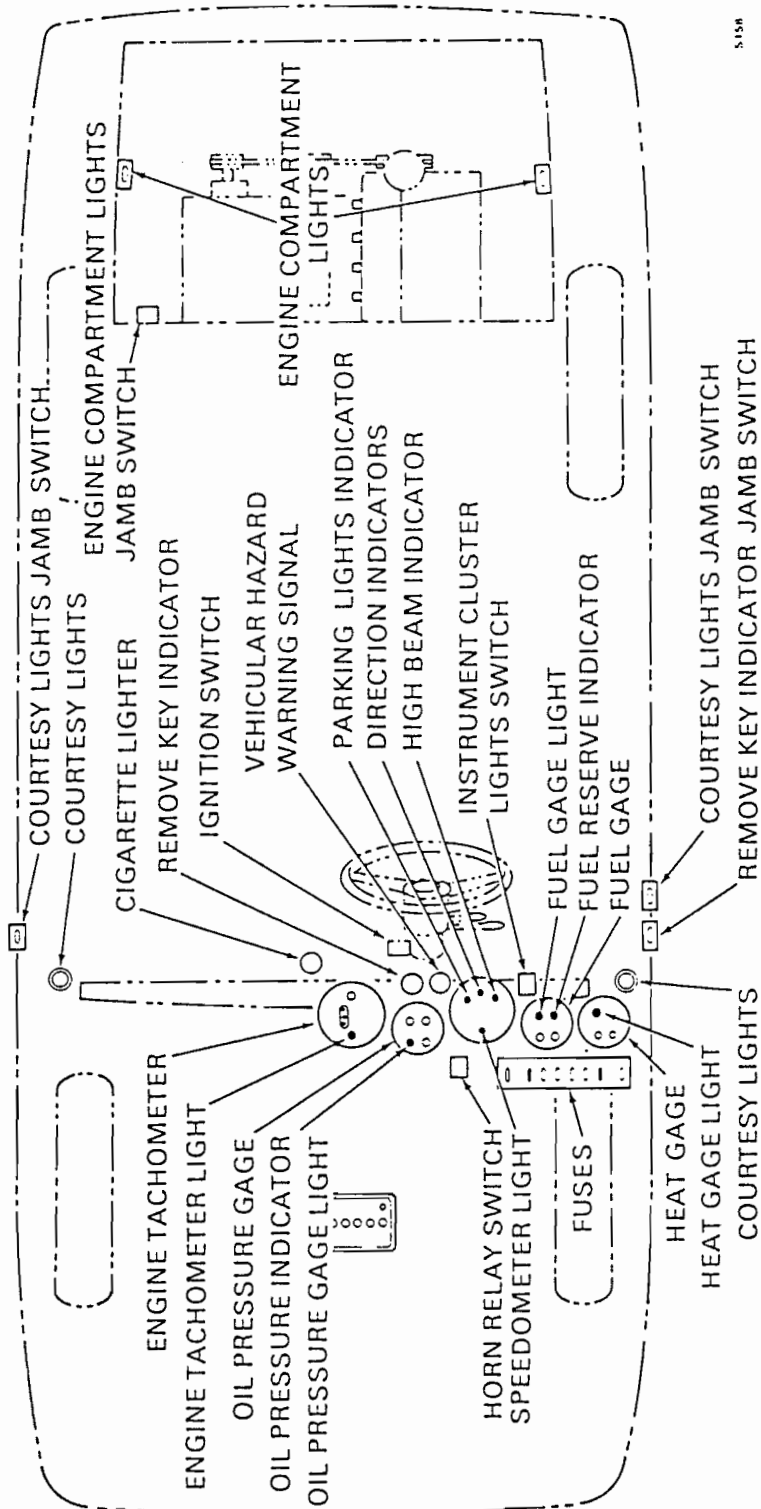
- 1.a. Check fuse. Fuse is not located on fuse panel, but in circuit of pink and white wiring leading from bottom of ignition switch as shown.
- b. If fuse is blown, replace.



5211

- c. If fuse is good, check to be sure pink and orange wires are connected at ignition switch.
- d. If O.K., go to step 2.



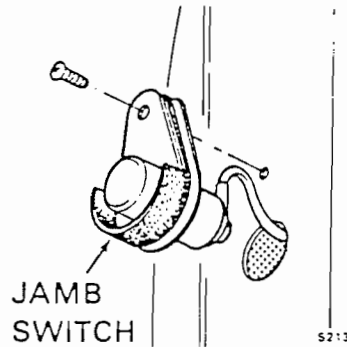


INTERIOR LIGHTS

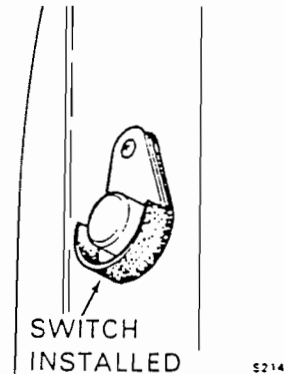
TABLE OF CONTENTS

SECTION	PAGE
● KEY INDICATOR LIGHT WON'T WORK	97
● KEY INDICATOR LIGHT WILL NOT GO OUT WITH DOOR CLOSED AND KEY IN	100
● COURTESY LIGHTS NOT ON WITH DOOR OPEN	101
● ENGINE COMPARTMENT LIGHTS NOT LIT	106
● BRAKE INDICATOR LIGHT WON'T WORK WITH LEVER DRAWN UP	107
● INSTRUMENT LIGHTS WILL NOT LIGHT	109
● VEHICLE WARNING INDICATOR LIGHT DOES NOT FLASH	111
● DIRECTION INDICATOR LIGHT NOT WORKING	112

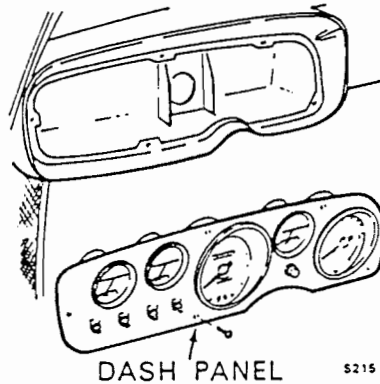
- 2.a. Remove jamb switch on left hand door facing.
- b. Check terminal for good connection and switch mounting screw for positive ground. (Loose mounting gives poor ground.)



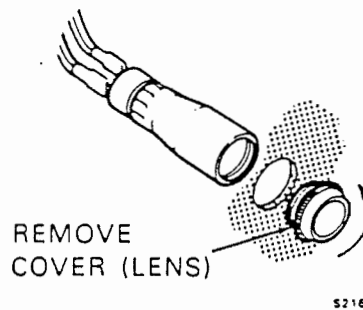
- c. Reinstall jamb switch. If light does not come on, go to step 3.



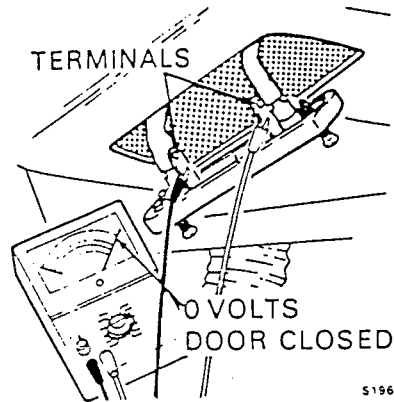
- 3.a. Remove dash panel.



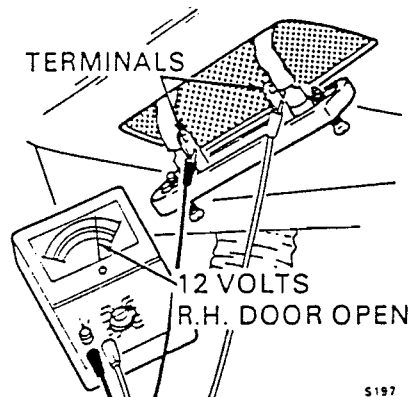
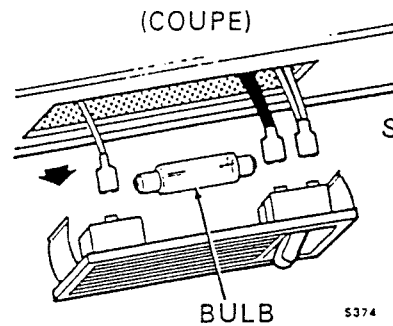
- b. Remove light from panel by turning orange cover counterclockwise. With cover off, light can be pulled down as shown.



- 5.a. Remove left or right courtesy light. (One only in Coupe.)



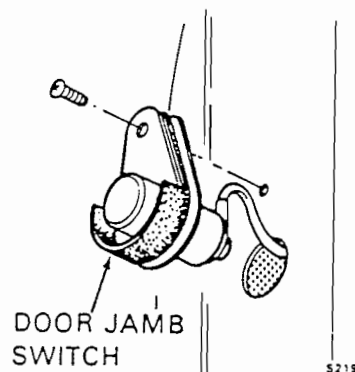
- b. Connect meter to light terminals as shown.
- c. Close both doors. Voltage should read zero (0).
- d. Open right door. Meter should read 12 volts.
- e. If not, check jamb switch at right door to courtesy light for breaks in wire.
- f. If O.K., close right door and open left door. Meter should read 12 volts.
- g. If not, check jamb switch at left door to courtesy light for breaks in wire.
- h. If O.K., close both doors.



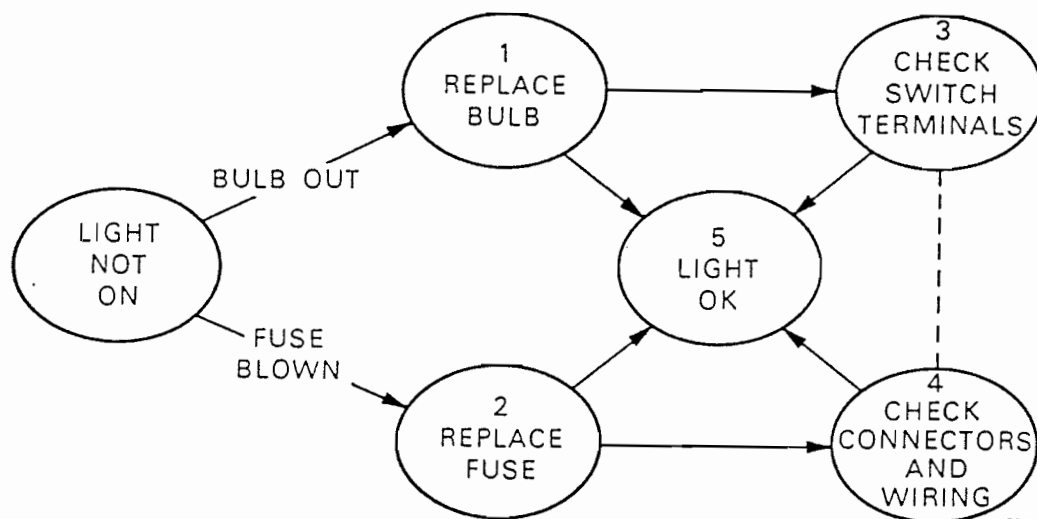
KEY INDICATOR LIGHT WILL NOT
GO OUT WITH DOOR CLOSED
AND KEY IN

- 1.a. Open door.
- b. Remove key.
- c. Close door.

If light goes out, check for short
in wire to jamb switch in left
hand door facing.

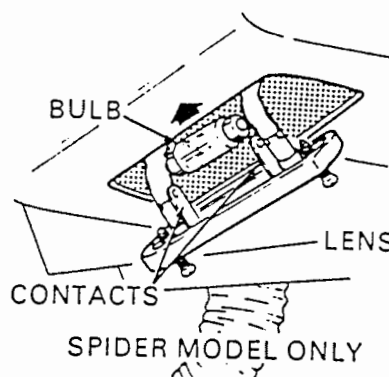


COURTESY LIGHTS NOT ON WITH DOOR OPEN



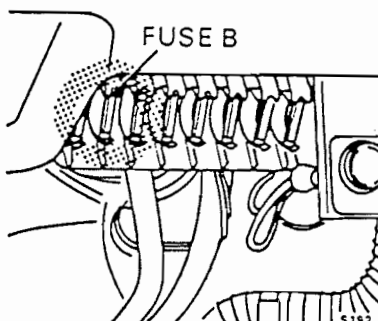
S210

- 1.a. If only one light comes on, replace bulb in one that does not light and check (Spider model only). If light stays out, go to step 3.
- b. If both lights (one only in Coupe model) are out, go to step 2.
- 2.a. Try horn.
- b. If horn blows, go to step 3.



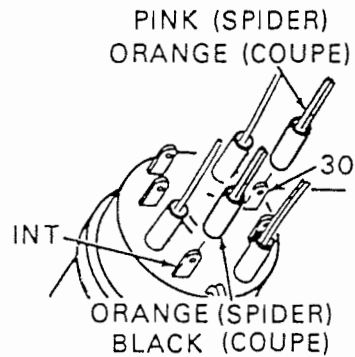
S191

- c. If horn does not blow, check fuse B.
- d. Replace if blown.

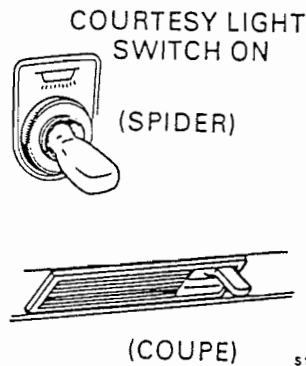


S192

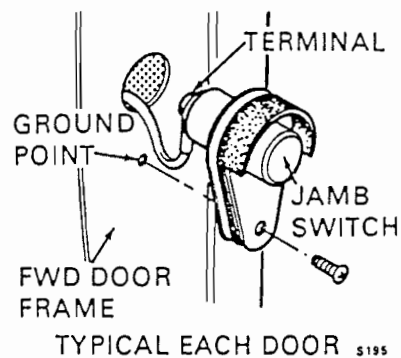
- e. If fuse is good, check pink (Spider) or orange (Coupe) wire connections at ignition switch.



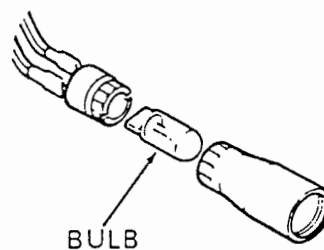
- 3.a. Close both doors.
b. Turn courtesy light switch on.
c. If lights come on, go to step 4.
If lights do not come on, go to step 5.
d. Turn courtesy light switch off.



- 4.a. Open doors and remove left and right jamb switches.
b. Check terminals at switches for good connection and ground at mounting screw (loose screw can cause poor ground).
c. Reinstall switches.
If lights still do not work, go to step 5.

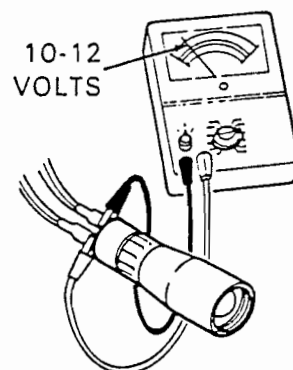


- c. Replace bulb with new one. If light does not come on, go to step 4.



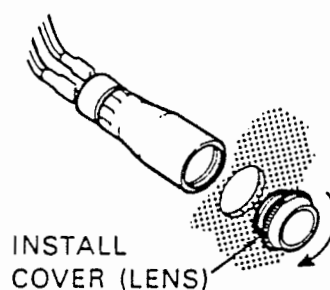
S217

- 4.a. Hook meter across bulb terminals as shown. Voltage should read 12 volts with key in and door closed.
- b. If switch, wiring, fuse, and bulb check out O.K., check white wire to ignition switch. If white wire O.K., replace ignition switch.



S220

- c. Reinstall dash panel indicator lamp.



S216

- i. Turn courtesy light switch on.
Meter should read 12 volts.
- j. If not, turn switch off and re-
move wires from switch.

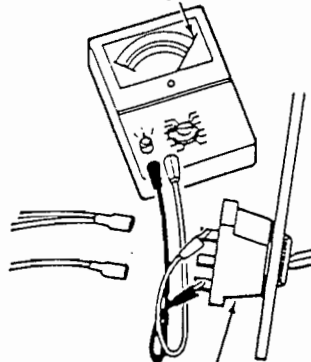


(COUPE)

S198

- k. Connect meter to switch termi-
nals. Set to read ohms.
- l. Turn switch on.
Meter should read no (0) resist-
ance.

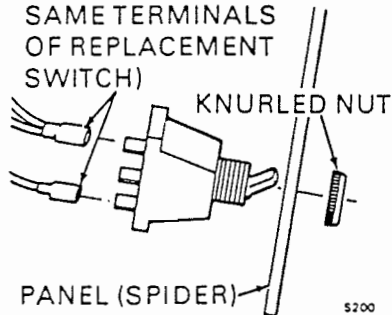
0 RESISTANCE



SWITCH (SPIDER)

S199

WIRES REMOVED
(RECONNECT TO
SAME TERMINALS
OF REPLACEMENT
SWITCH)

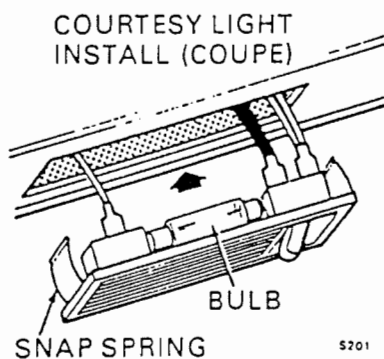


PANEL (SPIDER)

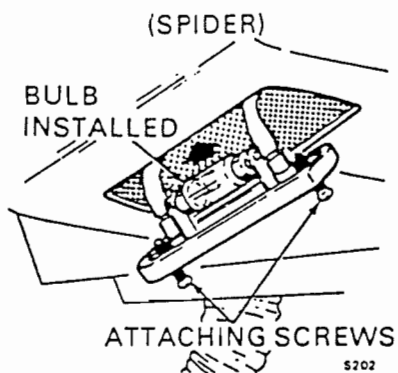
S200

- m. If resistance is read, replace
switch.

- n. If resistance is 0, reinstall courtesy light removed.

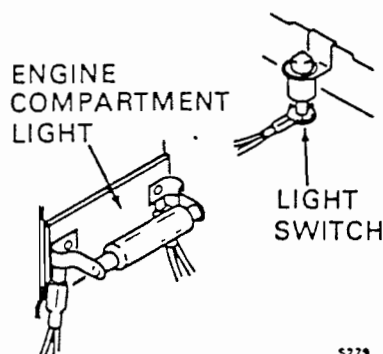
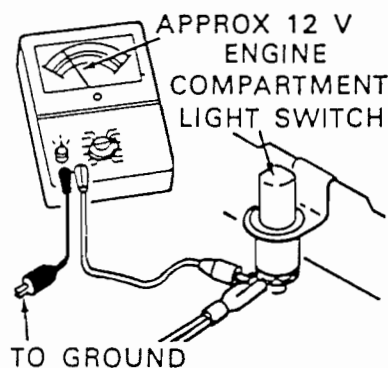
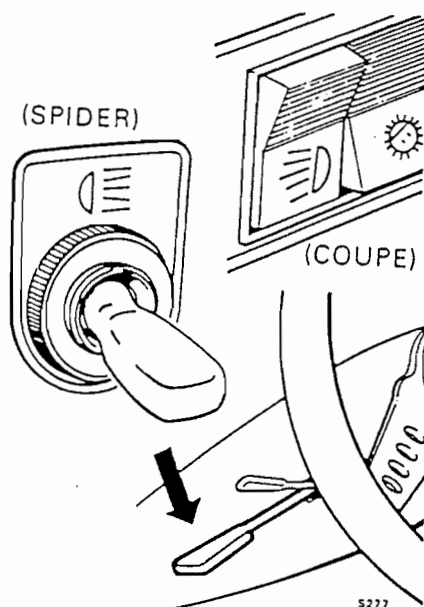


- o. Remove opposite courtesy light and repeat checks for this side, same as was done in steps 5.a. through 5.i. (Spider only).
- p. Job complete.



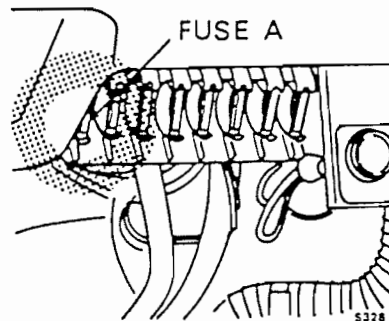
ENGINE COMPARTMENT LIGHTS NOT LIT

- 1.a. Turn headlights on.
Put light switch lever in park.
If front left or right rear parking lights come on, fuse and switch O.K. Go to step 2.
- b. If lights don't come on, check fuse G.
- c. Replace fuse if blown.
- d. Check that grey/black and black wires are connected to ignition switch. If lights do not come on, go to PARKING LIGHTS AND SIDE MARKER troubleshooting.
- 2.a. Raise engine compartment lid.
- b. Observe if both lights are out.
- c. (Spider Only) If both are out, go to step 3.
- d. If only one is out, replace bulb. If it remains out, go to step 3.
- 3.a. Connect red lead of meter to wires of engine compartment light switch and black lead to any ground. 12 volts should be read.
- b. If 12 volts are not read, check wiring to switch.
- c. If 12 volts are read, check switch for corrosion, wiring to lights, and bulbs for good connections.

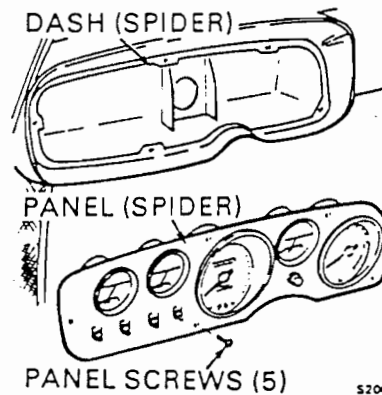


BRAKE INDICATOR LIGHT WON'T WORK WITH LEVER DRAWN UP

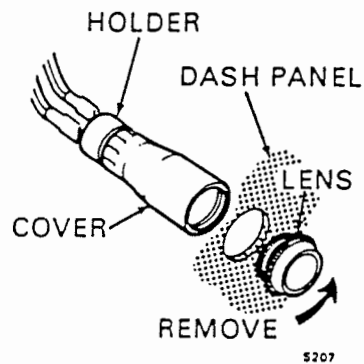
- 1.a. Check fuse A.
- b. If fuse is blown, replace.



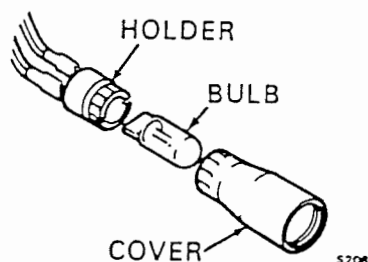
- c. If fuse is good, check connection of pink, orange double blue/black & black wires at ignition switch.
- d. If O.K., go to step 2.
- 2.a. Remove dash panel.



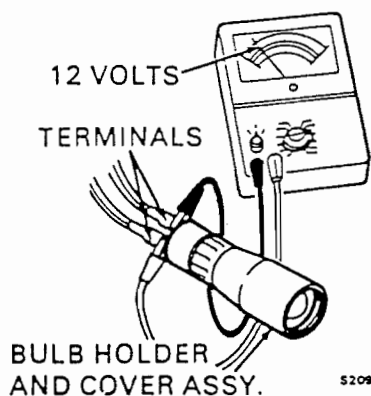
- b. Remove indicator light from panel by turning lens counter-clockwise.



- c. Remove cover and light bulb.
- d. Replace bulb with new one.
- e. Turn on ignition switch. If light will not come on, go to step 3.
- f. Turn ignition switch off.



- 3.a. Connect leads of meter to terminals of light as shown.
- b. Turn ignition switch on. Meter should read 12 volts with lever drawn up.
- c. If not, go to step 4. If voltage is read, replace bulb in step 2.



- 4.a. If voltage was not read, check for broken wire between light and switch on console.
- b. If wire is good, check for disconnected terminals at console.
- c. Reinstall dash panel.

INSTRUMENT LIGHTS WILL NOT LIGHT

HEADLIGHT SWITCH ON



S272

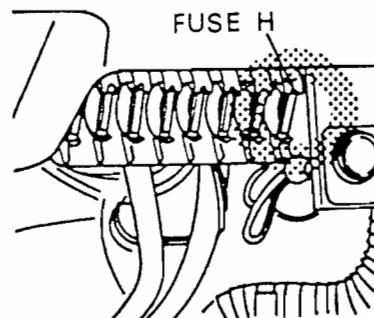
- 1.a. Turn headlights switch on.
- b. Check to see if headlights are lit.
- c. If headlights work, go to step 2.
If headlights are out, go to HEADLIGHT troubleshooting.
- d. Turn instrument light switch on and observe lights.
- e. If all lights are out, go to step 2.
- f. If only some lights are out, go to step 4.
- g. Turn switches off.

INSTRUMENT LIGHT SWITCH ON



S347

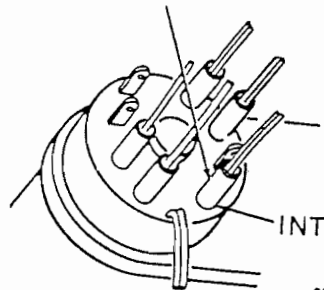
- 2.a. Check fuse H.



S273

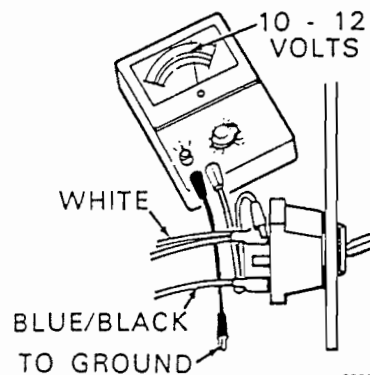
- b. If fuse H is blown, replace.
- c. If fuse H is not blown, check grey/black (Spider) or black (Coupe) wire connections at ignition switch.
- d. If O.K., go to step 3.

GRAY/BLACK (SPIDER)
BLACK (COUPE)



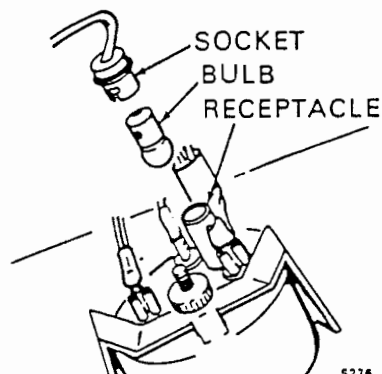
5274

- 3.a. Remove dash panel.
- b. Connect meter to instrument light switch and ground as shown.
- c. Turn headlight switch and instrument light switch on. Meter should read 12 volts.
- d. If voltage is not read, switch or wiring is defective.
- e. Replace and repair as necessary.



5275

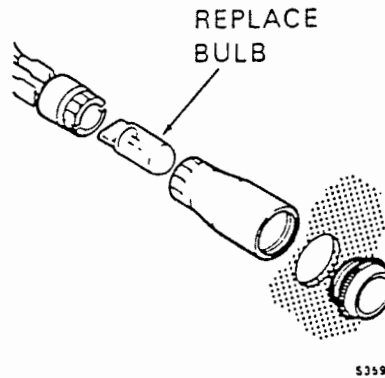
- 4.a. Remove bulbs not burning and replace with new bulb.
- b. In instances where changing bulb does not work, check wiring to bulb.



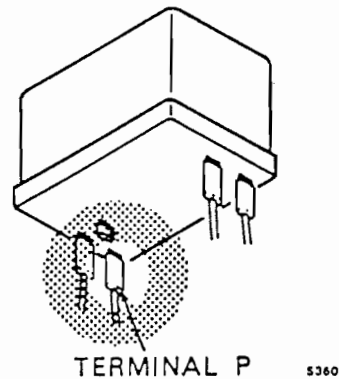
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VEHICLE WARNING INDICATOR LIGHT DOES NOT FLASH

- 1.a. Remove bulb holder from back of light lens.
- b. Remove bulb and replace with new one.
- c. Reinstall bulb holder in back of light lens.
- d. Turn signal switch on.
- e. If light flashes, job complete.
- f. If light does not flash, go to step 2. Turn switch off.

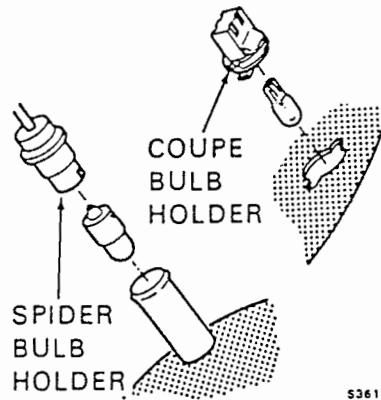


- 2.a. Check the white wire from the light to the vehicle hazard flasher terminal P for breaks or poor connections. Repair or replace.
- b. Turn signal switch on.
- c. If light flashes, job complete.
- d. If light does not flash, go to VEHICLE WARNING LIGHTS DO NOT FLASH (EXTERIOR LIGHTS).

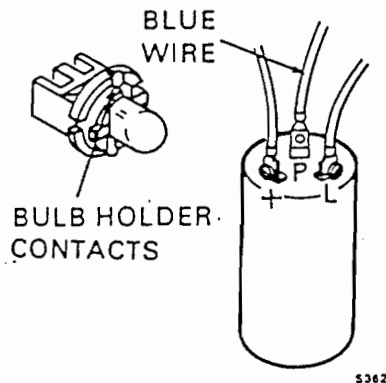


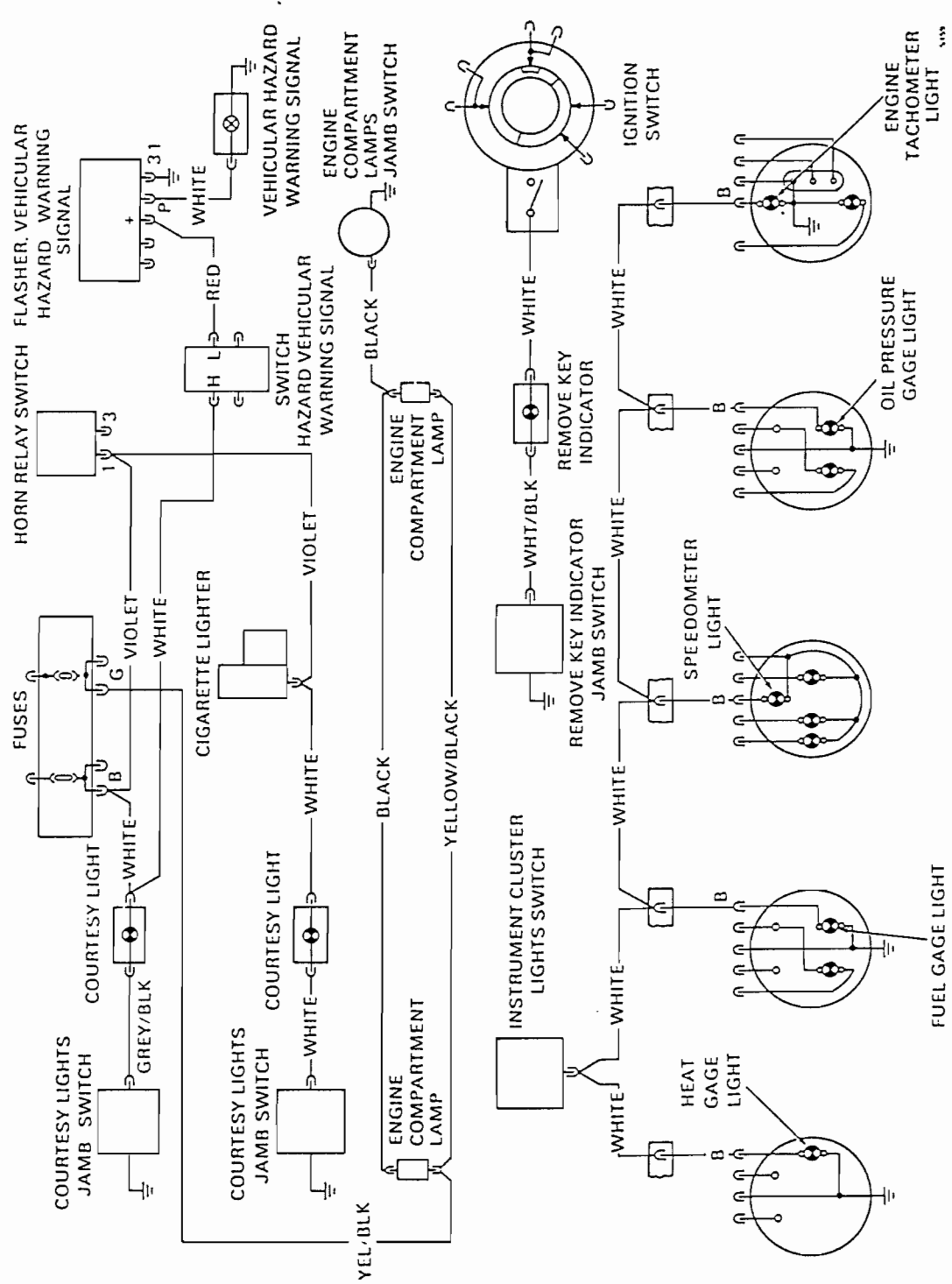
DIRECTION INDICATOR LIGHT NOT WORKING

- 1.a. If exterior lights are working, remove bulb holder from instrument panel (panel removed).
- b. Remove bulb and replace with a new one.
- c. Reinstall bulb holder.
- d. Turn ignition switch on.
- e. Place directional light switch lever to left or right position. If light works, job complete.
- f. If light does not work, go to step 2. Turn ignition switch off.



- 2.a. Check the blue wire from the bulb to terminal P of the flasher for breaks or poor connections. (On Coupe models, check bulb holder contacts for condition.)
- b. Correct or repair any condition found.
- c. Turn ignition switch on. (Directional lever should be placed in left or right position.) If light works, job complete.
- d. If light does not work, go to **DIRECTIONAL LIGHTS NOT WORKING (EXTERIOR LIGHTS)**.

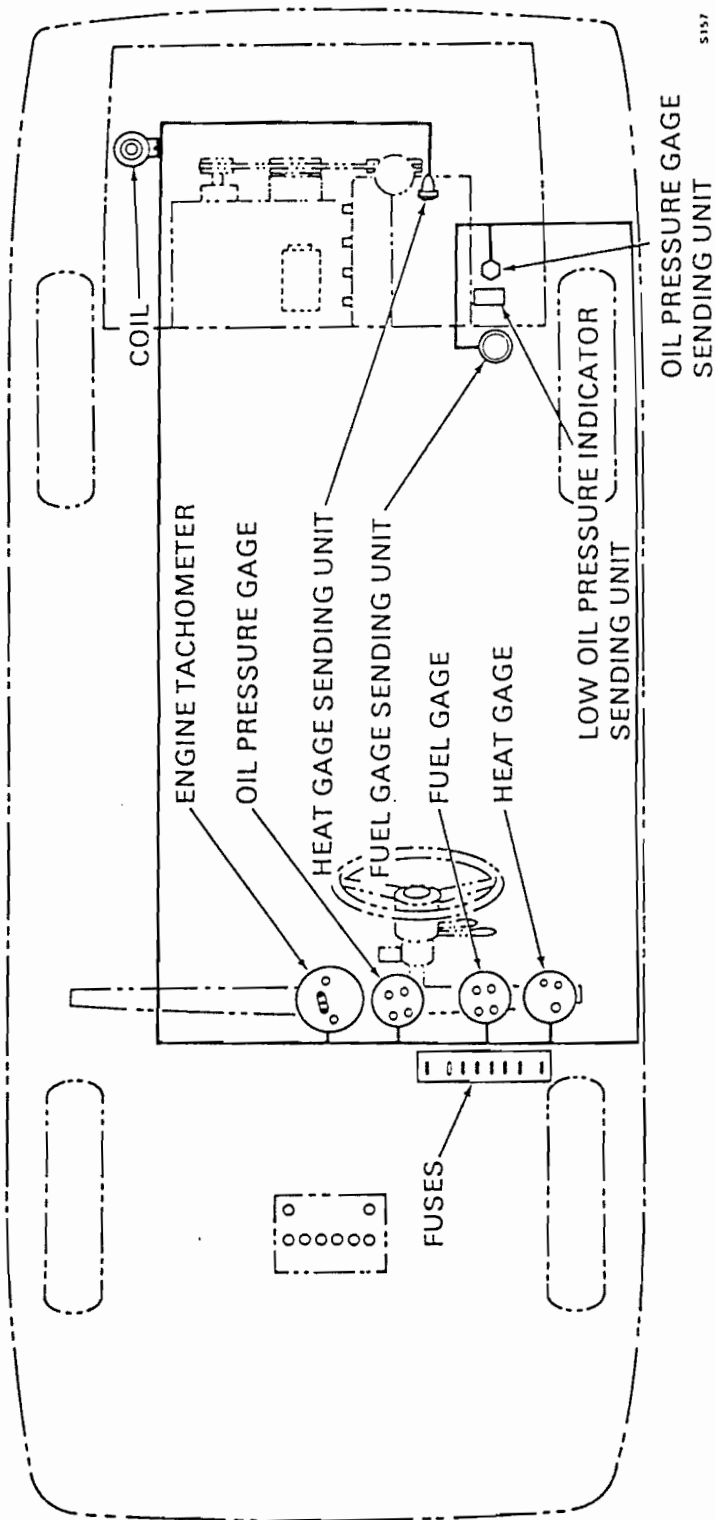




INSTRUMENTS

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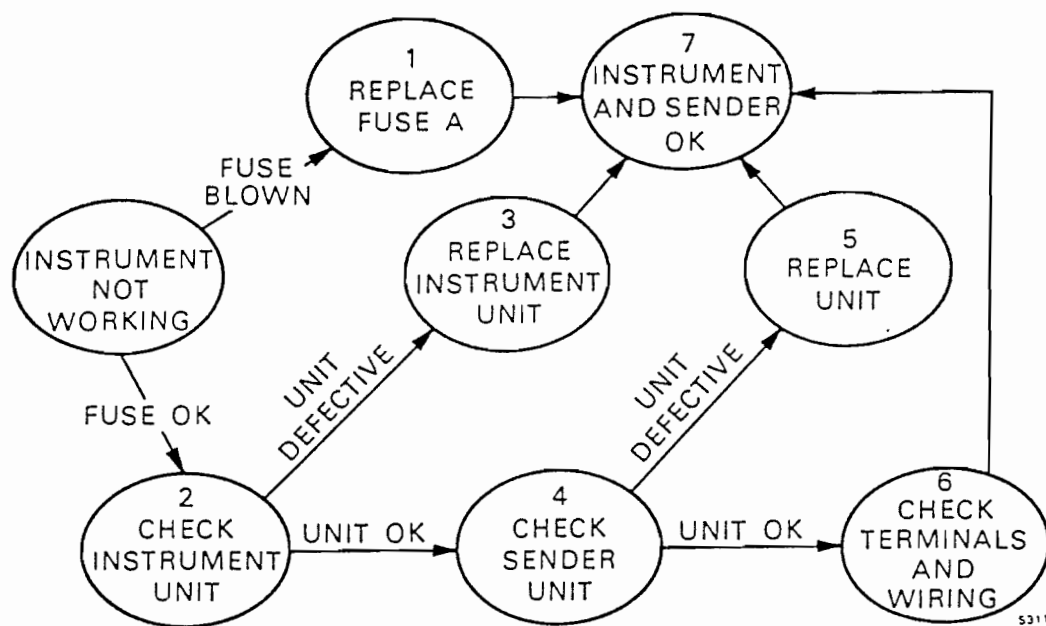
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● TEMPERATURE GAGE INOPERATIVE	117
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● OIL PRESSURE GAGE INOPERATIVE	123
● OIL PRESSURE GAGE ERRATIC	124
● LOW PRESSURE WARNING LIGHT OUT	125
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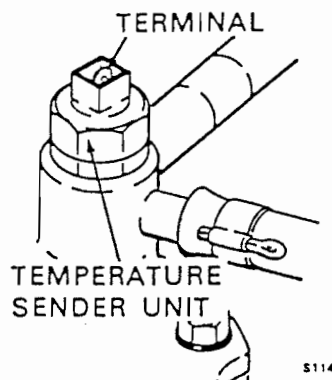
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INSTRUMENTS

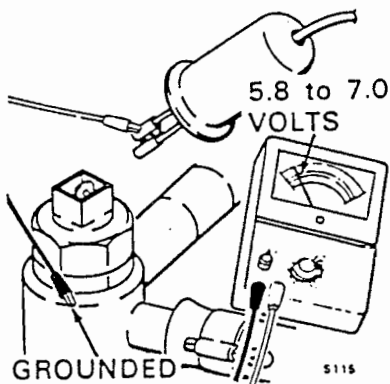
TEMPERATURE GAGE INOPERATIVE



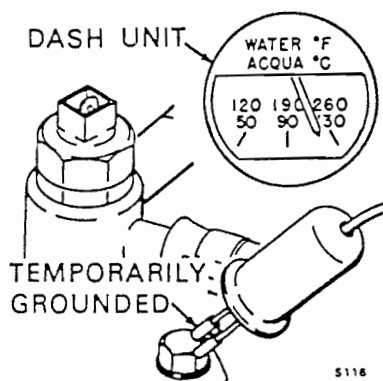
- 1.a. Check fuse A. Replace if blown.
- b. Check connection to sender unit at engine.
- c. If connection is good, remove green wire at sender unit.



- d. Connect red lead of meter to green wire.
- e. Connect black lead to ground.
- f. Turn ignition switch on. Meter should read 5.8 to 7.0 volts.

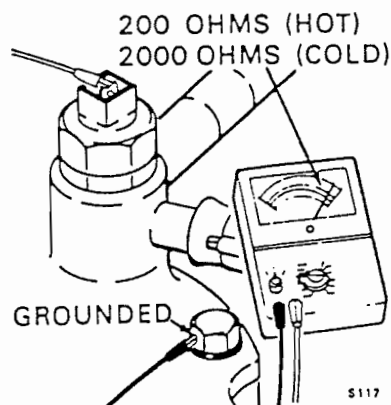


- g. If voltage is good, momentarily touch green wire to ground. Temperature gage should go to hot.
If gage does not go to hot or no voltage was read, go to step 3.



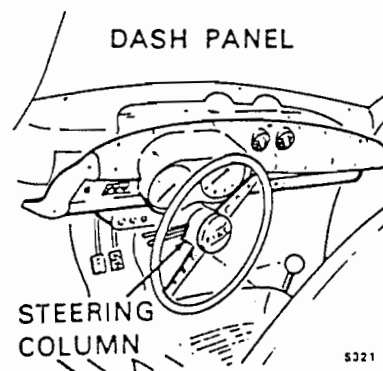
- h. Turn ignition switch off. If gage went to hot, continue troubleshooting sender unit in step 2.

- 2.a. Connect meter as shown to measure resistance. (Green wire removed from unit.) If engine has been run and is warm, resistance should read about 200 ohms



- b. If engine is cold, resistance will read about 2,000 ohms.
If resistance was higher in either case, sender unit is defective and should be replaced.

- 3.a. Remove dash panel.
b. Check terminal connections at temperature gage.
c. If connections are good, remove green wire from gage.



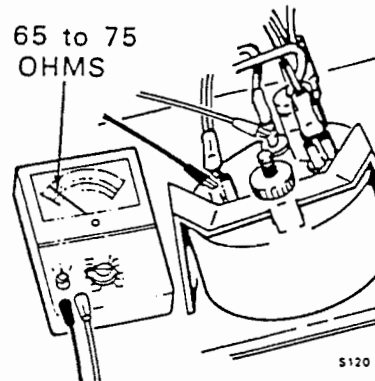
- d. Connect meter as shown. Resistance should read 65 to 75 ohms.

Be sure meter lead on terminal does not touch case or other ground.

If resistance is good, gage is O.K. Check wiring to sender.

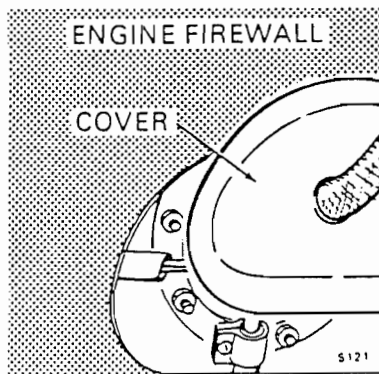
If resistance is low gage is defective and should be replaced.

- e. Remove meter and replace dash panel.

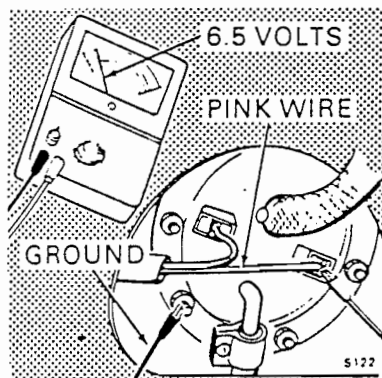


FUEL GAGE INOPERATIVE

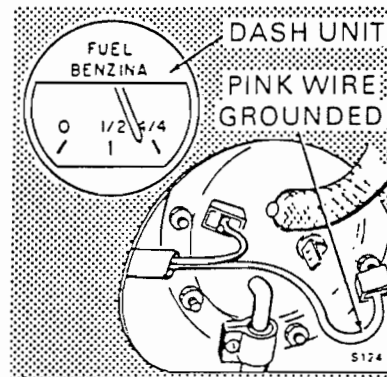
- 1.a. Be sure fuel tank is full by visual check.
- b. Check fuse A. Replace if blown.
- c. Remove cover at engine firewall.



- d. Remove pink wire.
- e. Connect meter to wire and ground.
- f. Turn ignition switch on. Meter should read about 6.5 volts.



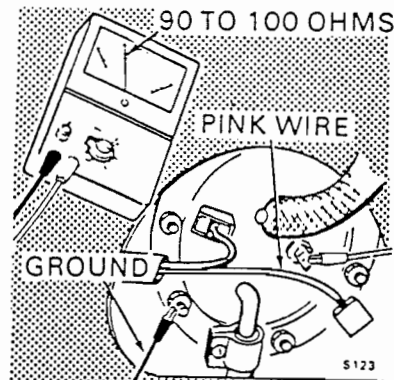
- g. Momentarily touch pink wire to ground.



Dash gage should read full.
If so, go to step 2.
If not, or no voltage was read,
go to step 3.

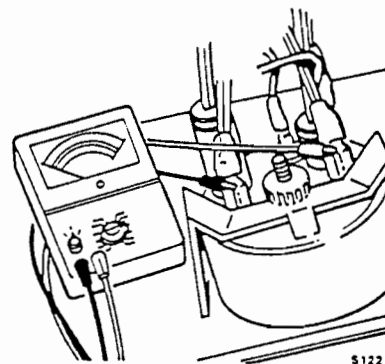
- h. Turn ignition switch off.

- 2.a. If gage went to full, connect meter to tank unit terminal and ground. Meter should read 90 to 100 ohms. If less, unit is defective and should be replaced.



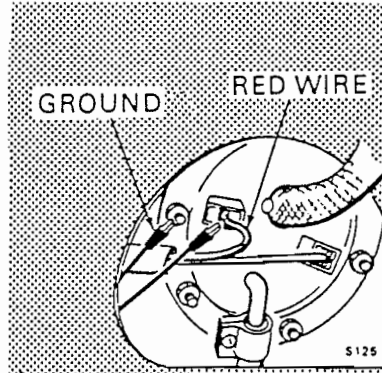
- 3.a. Remove dash panel.

- b. Check terminals at fuel gage. If terminals are good, connect meter as shown. If voltage is read gage is defective. If not, check orange wire and connections to fuse panel.

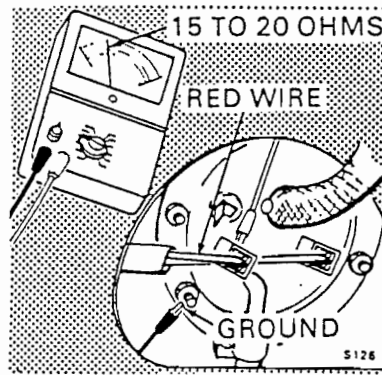


LOW FUEL WARNING INOPERATIVE

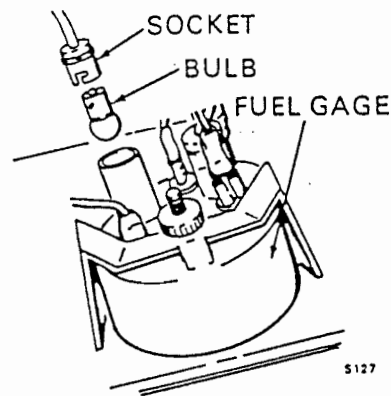
- 1.a. Check fuse A.
- b. Replace if blown.
- c. If O.K., turn ignition switch on.
- d. Temporarily connect a wire from red wire terminal to ground.
If light comes on, tank unit is defective.
- e. Turn ignition switch off.



- f. Connect meter as shown.
- g. Resistance should read 15 to 20 ohms. (Ignition switch off.)
If not, bulb in dash unit is no good.

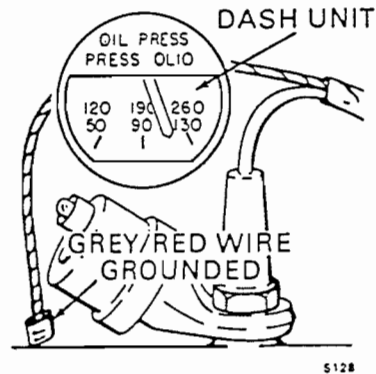


- h. Remove dash panel and replace bulb.
If bulb will not light, wiring is defective from fuse block.

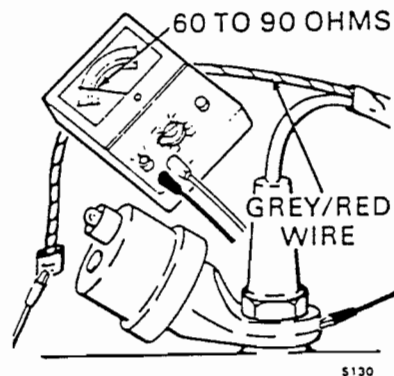


OIL PRESSURE GAGE INOPERATIVE

- 1.a. If other instruments are good, remove grey/red wire at engine unit.
- b. Turn ignition switch on.
- c. Temporarily ground wire to engine or exhaust pipe. Gage should go to high. If so, sender at engine is defective.
- d. If not, turn ignition switch off.

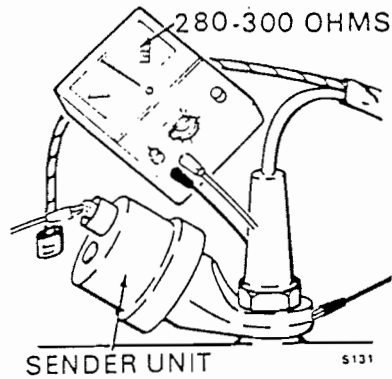


- e. Connect meter to red/grey wire and ground. Meter should read 60 to 90 ohms. If not, dash unit is defective.

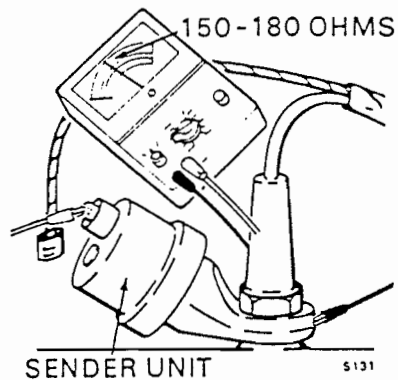


OIL PRESSURE GAGE ERRATIC

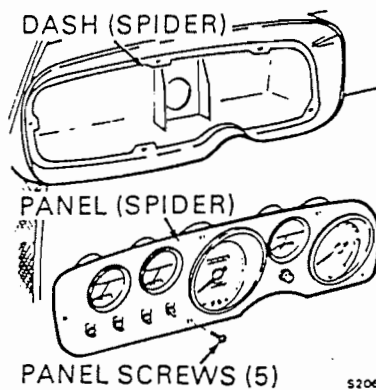
- 1.a. Make sure ignition switch is off.
- b. Connect meter to engine unit as shown.
Meter should read 280 to 300 ohms.



- c. Start engine and check reading again.
Meter should read between 150 to 180 at idle.
If readings cannot be obtained unit is defective.

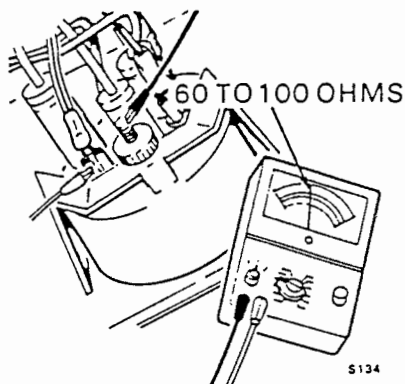


- d. If readings were good, turn ignition off.
- e. Remove dash panel.

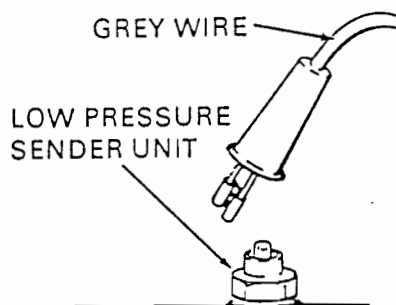


LOW PRESSURE WARNING LIGHT OUT

- f. Connect meter to black/grey wire and ground.
Meter should read 60 to 100 ohms. If not, gage is defective.



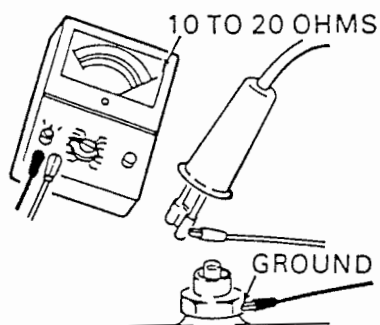
- 1.a. Check terminal at engine unit.
b. If loose, removed, or dirty, clean and replace.



- c. If O.K., temporarily ground grey wire.
d. Turn ignition switch on.
e. If light comes on, engine *unit is* defective.
f. *Turn* ignition switch off.

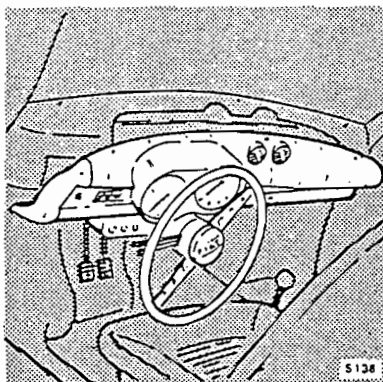


If light did not come on connect meter as shown. Resistance should read 10 to 20 ohms.

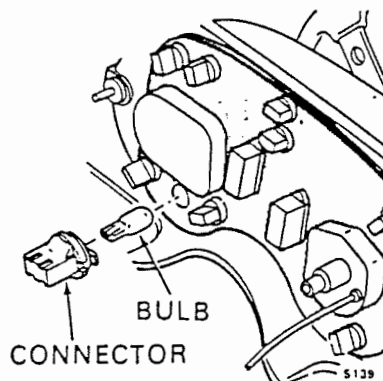


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- g. If not, remove dash panel and check yellow/black wire for good connection. If connection is good, bulb is blown or wire is defective between dash and engine unit.



- h. Replace bulb and turn ignition on. If still no light, yellow/black wire is broken at some point.



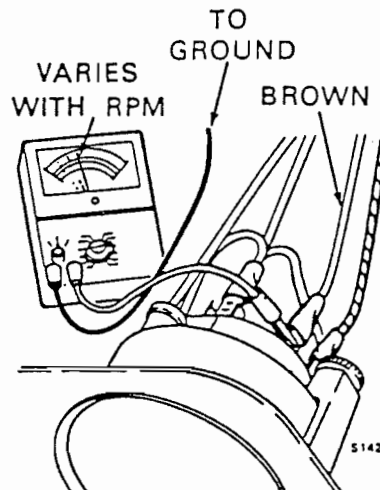
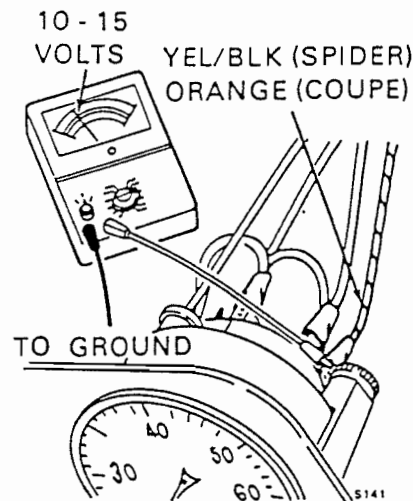
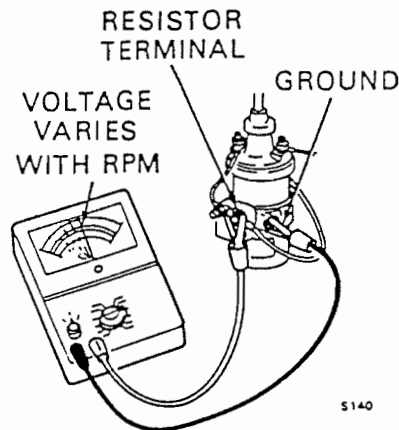
TACHOMETER DOESN'T WORK

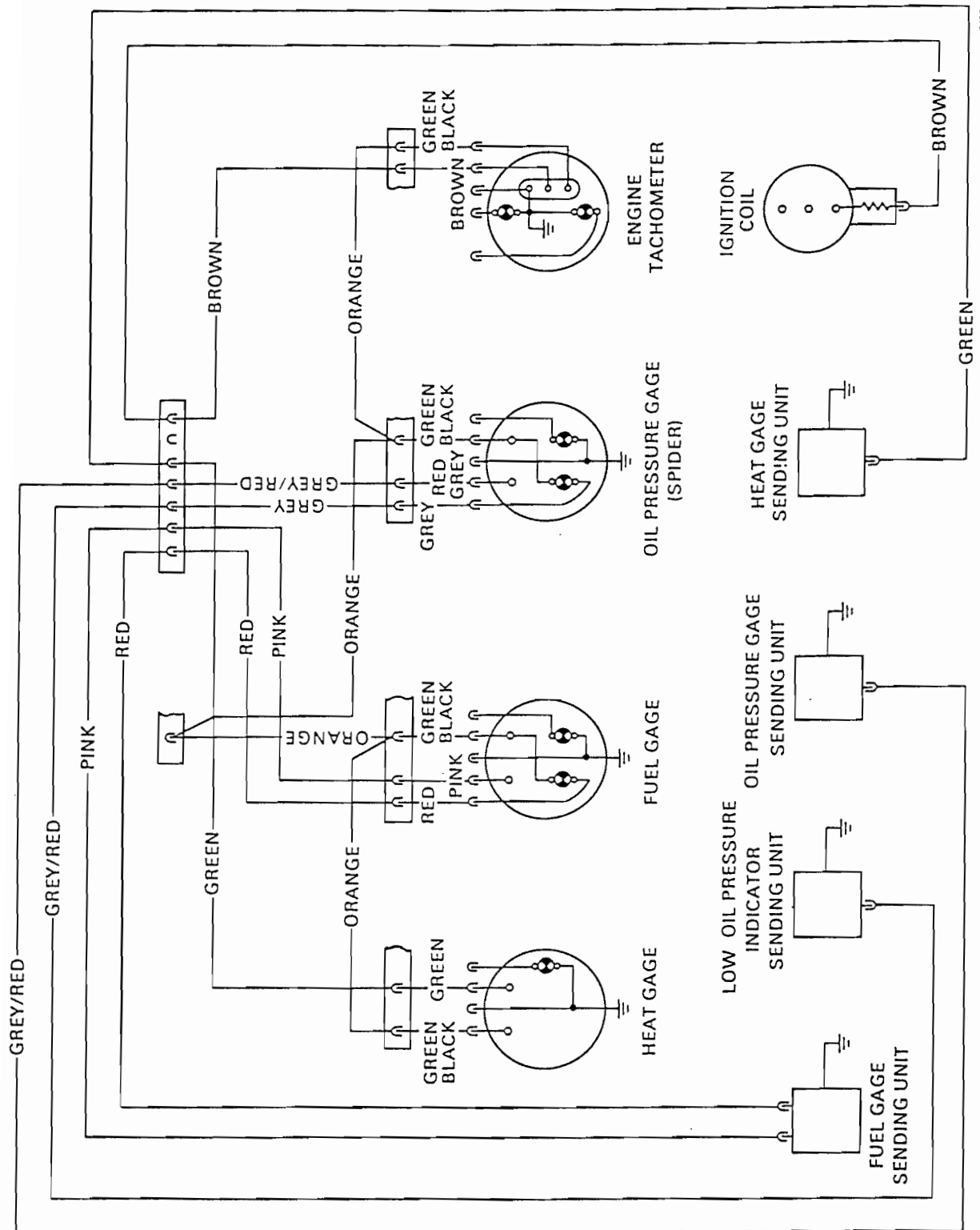
- 1.a. Check other instruments. If they work, fuse O.K. Go to step b. If instruments don't work, check fuse A circuits.

- b. Get meter. Setup as shown. Connect to resistor on coil. Start engine. Increase and decrease engine speed several times. Meter reading should increase and decrease with engine speed. If meter reading doesn't increase and decrease, brown wire to distributor open. If meter does increase and decrease go to step c.

- c. Stop engine. Remove dash panel. Turn on key. Measure voltage at yellow/black wire connection on tachometer. If 10 to 15 volts go to step d. If no volts yellow/black or orange wire to fuse broken. Repair wiring.

- d. Start engine. Connect meter to brown wire on back of tachometer as shown. Increase and decrease engine speed. Meter should increase and decrease too, if not, repair brown wire to distributor. If meter increases and decreases, replace tachometer.

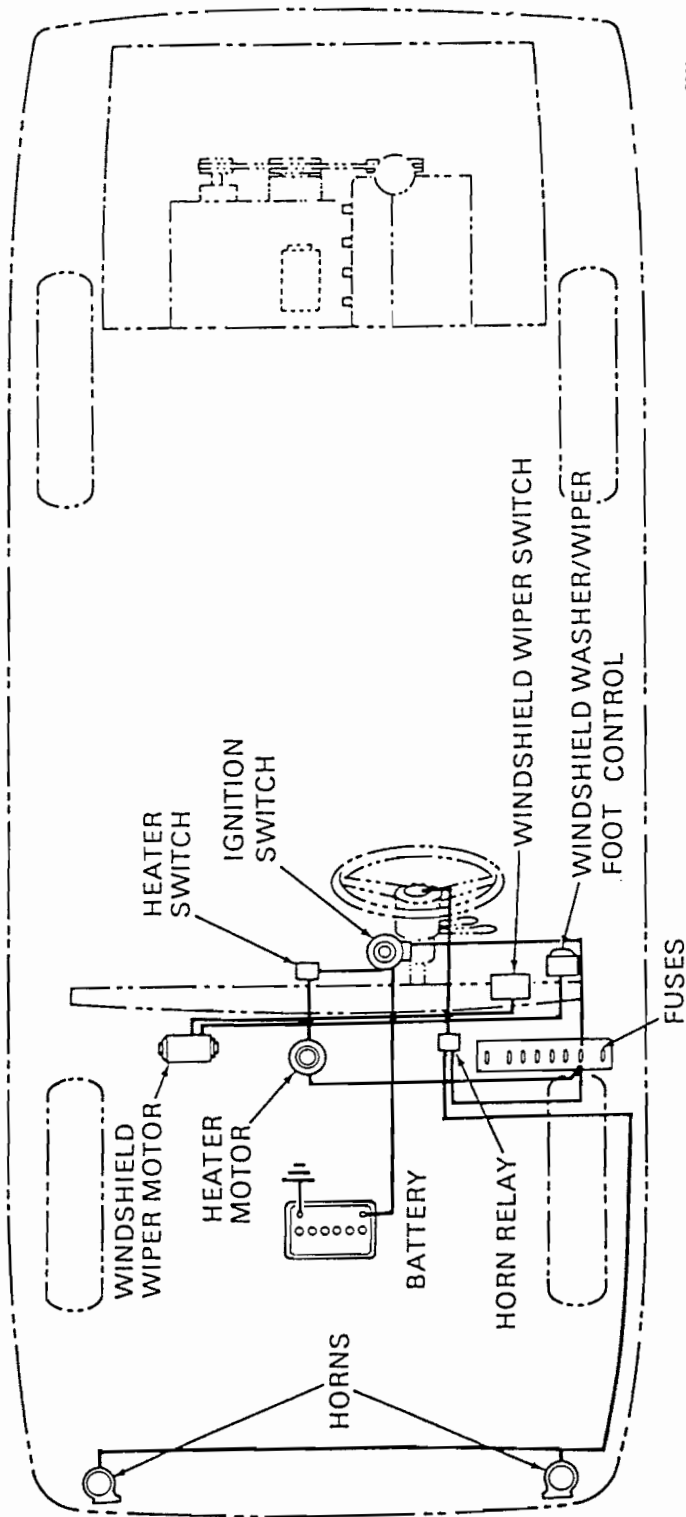




ACCESSORIES

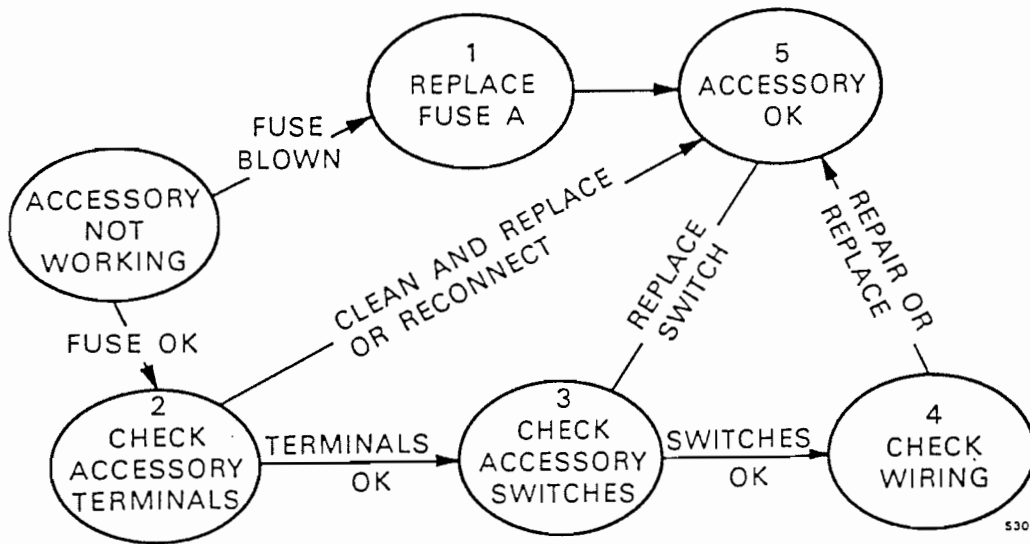
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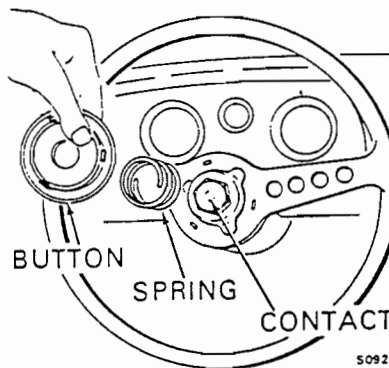
ACCESSORIES



5309

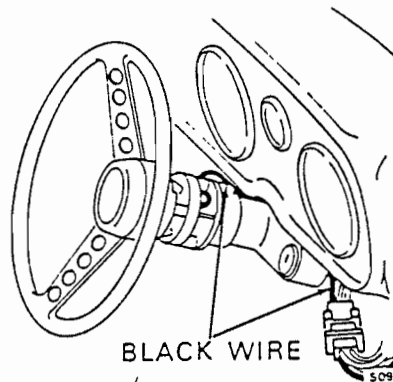
HORN WON'T STOP BLOWING

- 1.a. Remove horn button from steering wheel. Remove spring. If horn stops blowing, reassemble horn button. Use new parts if necessary.



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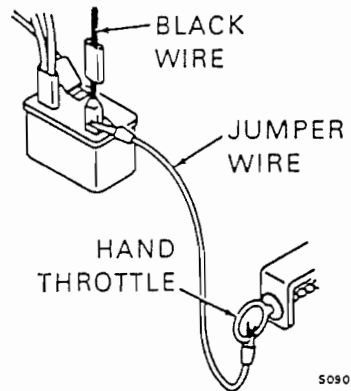
- b. If horn doesn't stop blowing with button removed, black wire from horn relay to horn button shorted. Check black wire; remove cover from under steering wheel if necessary. If O.K., replace horn.



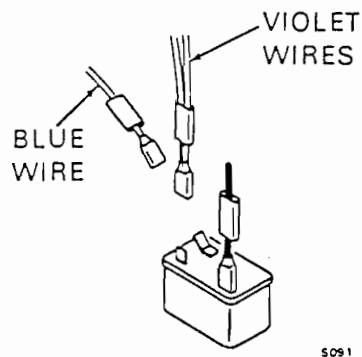
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HORN WON'T BLOW

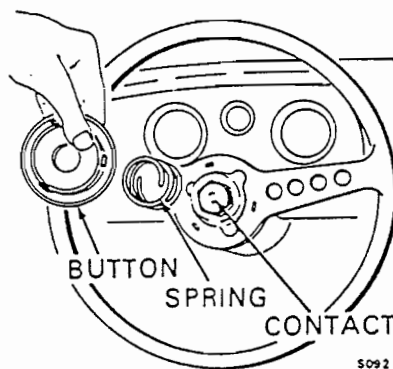
- 1.a. Get 2 foot jumper wire. Go to horn relay above clutch pedal.



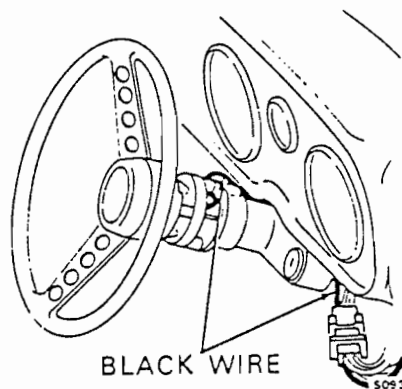
- b. Connect jumper to black wire on relay. Touch other end of wire to hand throttle (ground). If horn does not blow, go to step c. If horn blows, go to step 2.



- c. Disconnect jumper from relay. Disconnect blue and violet wires from relay.
- d. Touch terminals of blue and violet wires together. If horns blow, replace relay. If horns do not blow, check blue wires to horns.
- 2.a. Pry horn button from steering wheel. Check that brass contact is clean. Check that spring is not broken. Check that button is not broken. Replace any broken parts.



- b. Check all visible area of black wire through steering column for broken or disconnected wiring.



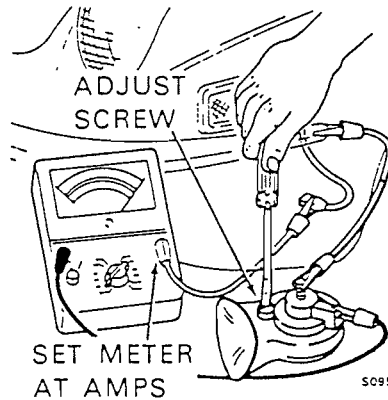
HORN BLOWS TOO LOUD OR TOO LOW

- 1.a. Remove horn. Connect meter to horn as shown.
- b. Adjust screw until horn blows O.K.
- c. Check amps when horn is blowing. AMPS must not be more than 3.5 (3½).

CAUTION

More than 3.5 amps may cause fuse B to blow.

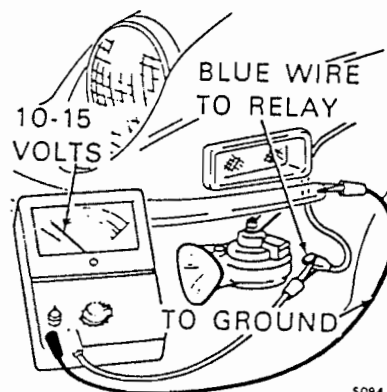
- d. Install horn.



- e. If horn button O.K., remove cover from under ignition switch.
Check that black wire to horn button is not broken. Check that same wire to horn relay is not broken.

LEFT OR RIGHT HORN DOES NOT BLOW

- 1.a. Disconnect blue wire from horn that does not work. Connect meter as shown.
- b. Push horn button. Meter should indicate 10 to 15 volts.
- c. If meter does not indicate 10 to 15 volts, check blue wire to relay.
- d. If meter indicates 10 to 15 volts, remove horn. Check that horn attachments to body are clean.

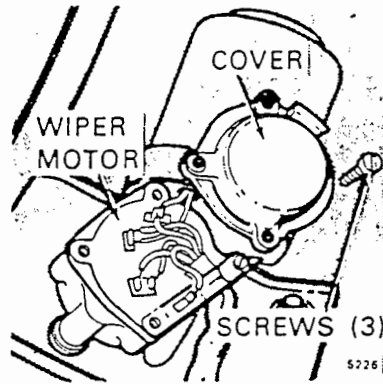


WINDSHIELD WIPERS WON'T WORK

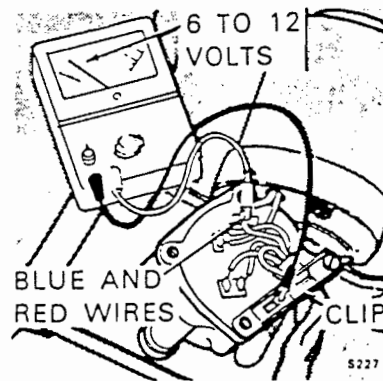
- 1.a. Check fuse A by turning key on and checking that instruments and charge indicator light works. If they work, fuse A is O.K. Go to step 2. If they don't work, troubleshoot fuse A circuits.
- 2.a. Remove three screws from plastic cover on wiper motor. Remove cover.

NOTE

On Coupe, remove padded dash to get to wiper motor.

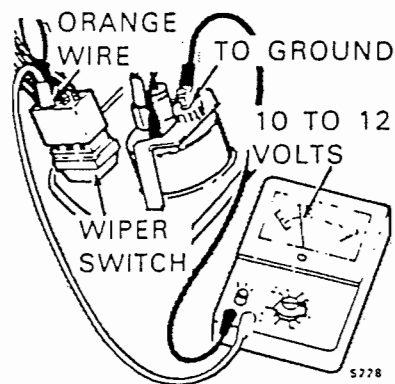


- 3.a. Get meter.
- b. Connect meter red lead to terminal of blue and red wires. Connect black meter lead to clip.
- c. Turn on ignition and wiper switch. Meter should read 6 to 8 volts on low speed and 10 to 12 volts on high speed. If volts are O.K., go to step 4. If not O.K., go to step 5.

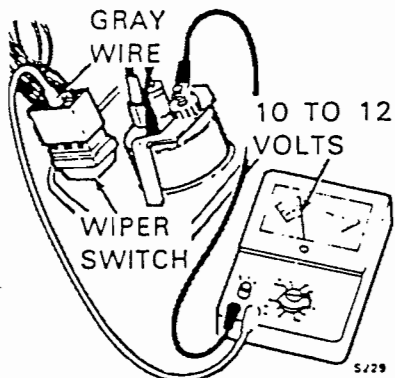
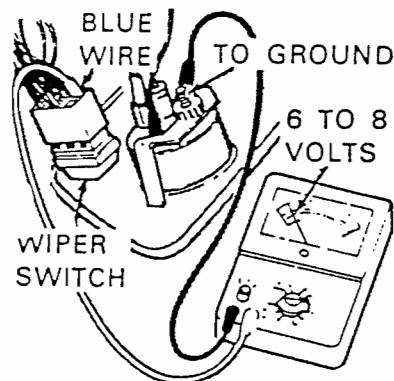


- 4.a. Set meter to measure ohms (RX1). Ignition and wiper switches off.
- b. Connect meter red lead to black wire on clip. Connect meter black wire to ground. If meter indicates 0 ohms, replace motor. If meter indicates infinity (∞), check black wire to rheostat. If wire O.K., replace rheostat.

- 5.a. Remove dash panel.
- b. Connect red meter lead to either orange wire on back of wiper switch. Connect black meter lead to ground. Turn on ignition switch. If meter does not indicate 10 to 12 volts, check orange wire to fuse panel. If meter indicates 12 volts, go to step c.

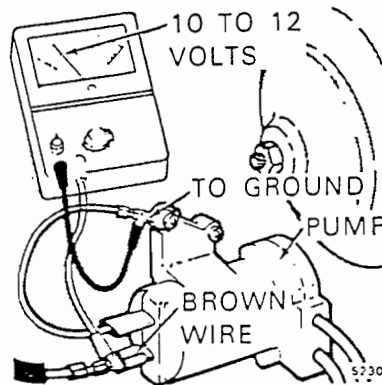


- c. Connect red meter lead to blue wire terminal on back of switch. Turn on switch. If meter does not indicate 6 to 8 volts, replace switch. If volts O.K., measure volts on grey wire terminal with switch on high. If meter does not indicate 10 to 12 volts, replace switch. If volts O.K. in this step, check blue and grey wires to wiper motor.



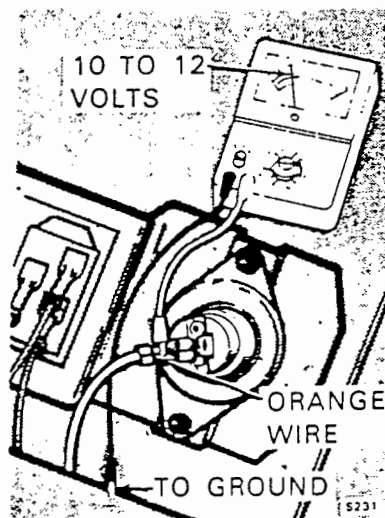
WINDSHIELD WASHER PUMP DOESN'T WORK (Coupe Only)

- 1.a. Check fuse A by turning key on; if instruments work, fuse A is O.K. Go to step 2. If instruments don't work, fuse A is blown. Go to FUSES Section.
- 2.a. Get meter. Set meter to measure volts.
- b. Go to washer pump (in trunk behind left head light).
- c. Remove brown wire connector.



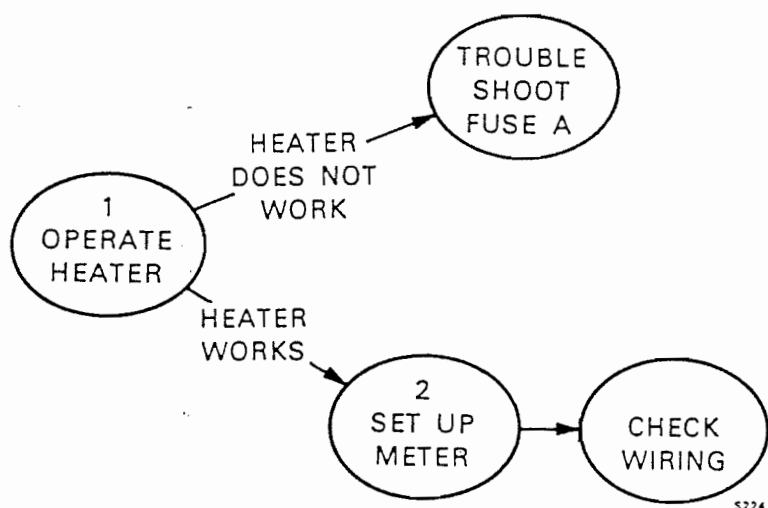
- d. Connect meter as shown.
- e. Push washer button on dash. If meter indicates 10 to 12 volts, go to step f. If meter does not indicate volts, go to step 3.
- f. Connect jumper wire to green wire terminal on motor. Connect opposite end of wire to ground (clean unpainted spot on body). Push washer button. If motor runs, repair green wire or connection. If motor don't run, replace it.

- 3.a. Remove padded dash.
- b. Get meter. Set meter to measure volts d.c.
- c. Connect meter red lead to orange wire connection on washer switch. Connect black lead to ground. Turn key on. If meter indicates 10 to 12 volts, go to step d. If meter does not indicate 10 to 12 volts, check orange wire to fuse panel.



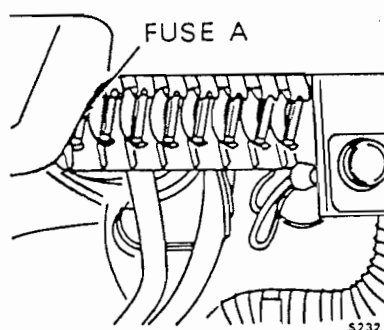
- d. Connect meter red lead to brown wire connection on back of switch. Depress switch. If meter does not indicate 10 to 12 volts, replace switch. If meter indicates 10 to 12 volts, check brown wire to pump.

HEATER MOTOR WON'T WORK

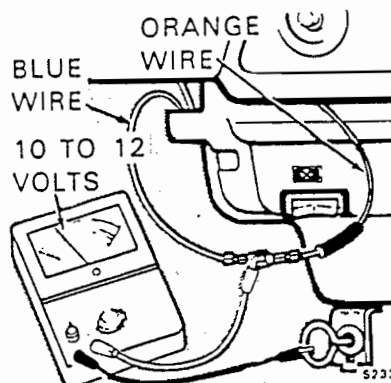


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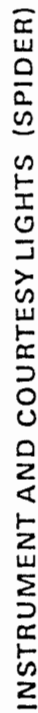
- 1.a. Check that fuse A is O.K. If blown, go to FUSES BLOW REPEATEDLY. If not blown go to step 2.
- 2.a. Locate orange and blue wire connection on left side of heater. Blue wire is connected to heater.
 - b. Slip rubber terminal from connection.
 - c. Connect meter. Set to measure volts to connection.
 - d. Turn key on.
 - e. If meter indicates 10 to 12 volts, replace heater. If meter does not indicate 10 to 12 volts, check orange wire to fuse panel.



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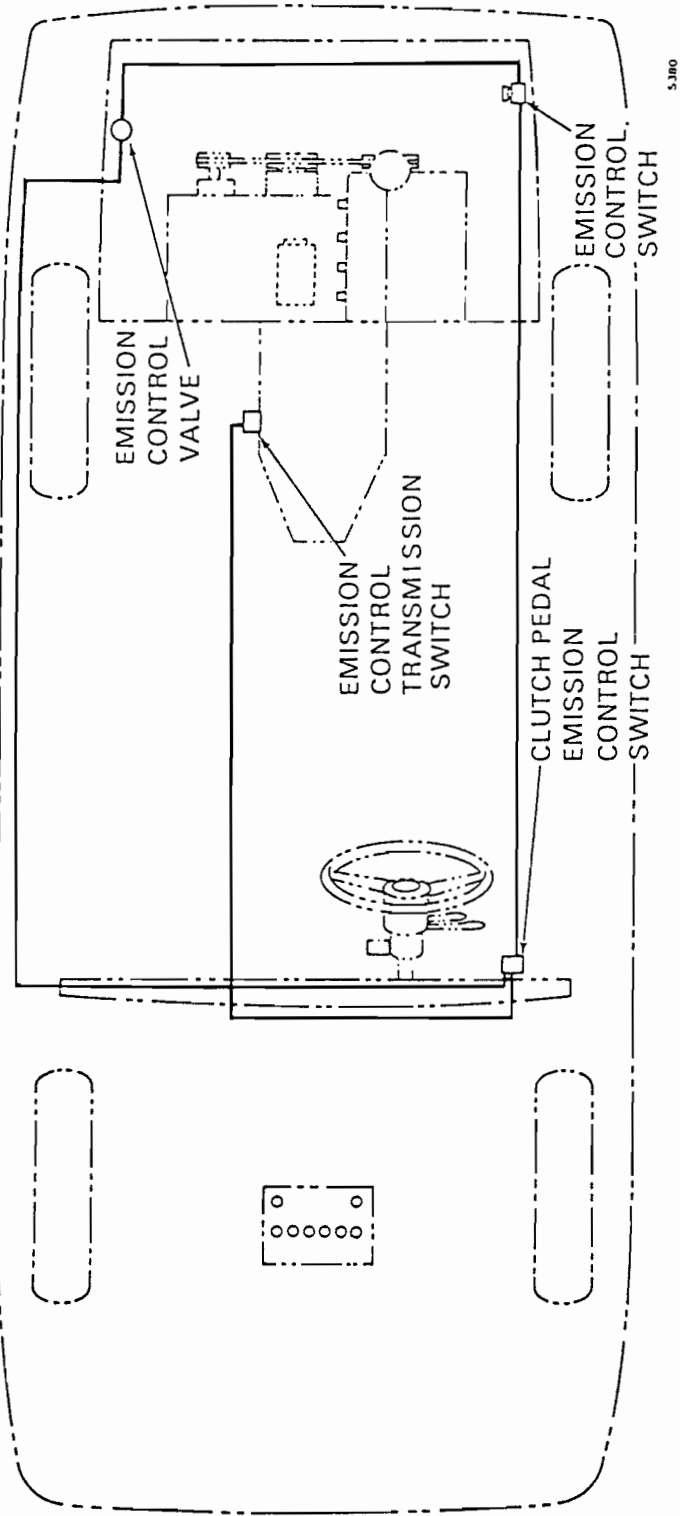
S233



EXHAUST EMISSION CONTROL SYSTEM

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5.300

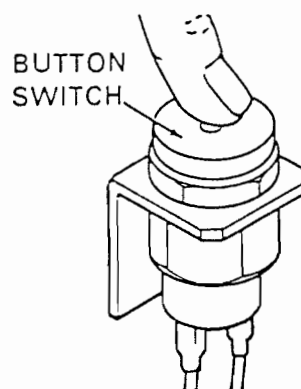
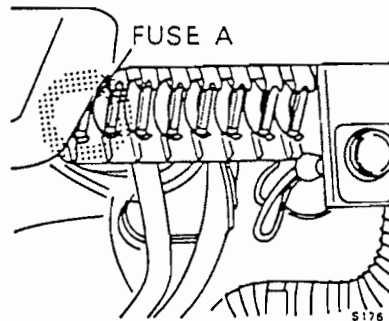
EXHAUST EMISSION CONTROL SYSTEM

LOW GAS MILEAGE/LOSS OF POWER/ROUGH IDLE

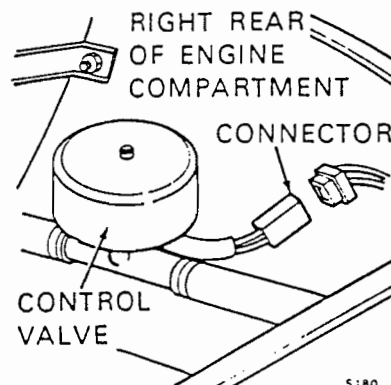
NOTE

If any of the above conditions exist after ignition and carburetion checks have been made, check for inoperative control valve.

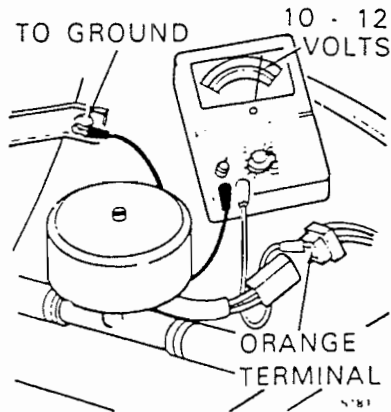
- 1.a. Check fuse A.
- b. If blown, replace.
- c. Turn on ignition switch.
- d. Put gearshift in 3rd gear position and listen for click of control valve.
- e. If heard, place gearshift in 4th gear and listen for click of valve. If heard, emission control system is operating; go to step 6.
- f. If click was not heard, press button switch in engine compartment. If click is heard, go to step 3. If not heard, go to step 2.
- g. Turn ignition switch off.



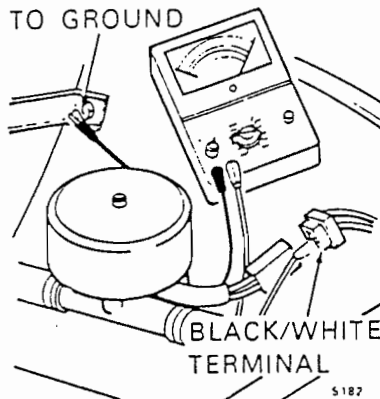
- 2.a. Disconnect white connector at control valve.



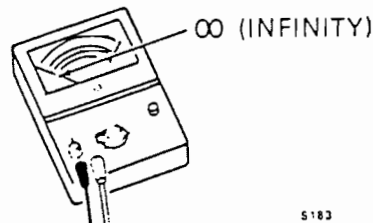
- b. Attach red lead of meter to orange terminal, and black lead to ground.
- c. Turn ignition switch on. Meter should read approximately 12 volts.
- d. If no volts are read and fuse A was good, orange wire is broken or disconnected at terminals.
- e. If voltage is read, go to step 3.
- f. Turn ignition switch off.



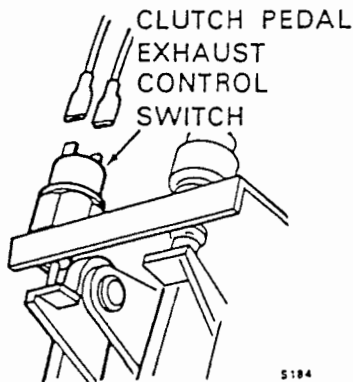
- 3.a. Connect meter red lead to grey/black wire at control valve connector.
- b. Connect black lead to ground.
- c. Place gearshift in 3rd and 4th gear positions and check resistance on meter. Reading should be 1 ohm or less (no resistance) at each position.



- d. If reading is good, push in clutch pedal and check resistance with gearshift in 3rd and 4th gear positions.
- e. Meter reading should go to infinity (∞) at each gear position when pedal is depressed. If any meter readings were not good, go to step 4.



- 4.a. Disconnect wires from switch at clutch pedal.

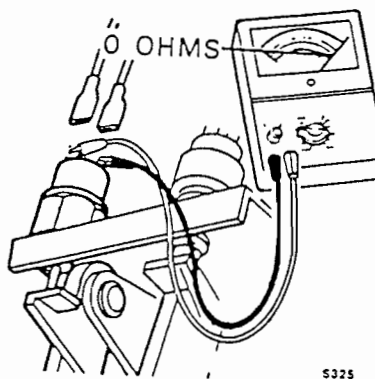


- b. Connect meter to terminals of switch.
Meter should read no (0) resistance with clutch pedal out.
- c. If any resistance is read, switch is defective and should be replaced.

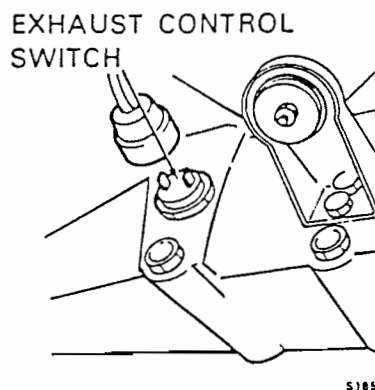
NOTE

Depressing clutch pedal with meter connected should cause reading to infinity (∞).

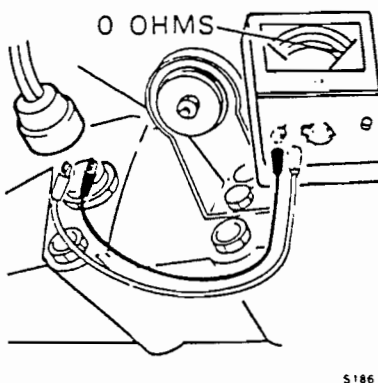
If reading is good, reinstall wires and go to step 5.



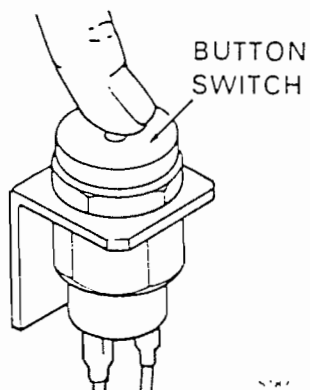
- 5.a. Remove wires from transmission switch.



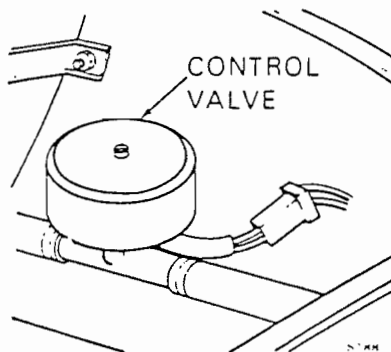
- b. Connect meter to switch terminals as shown.
Reading should be (0) resistance.
- c. If not, switch must be replaced.
- d. Replace wires on switch.



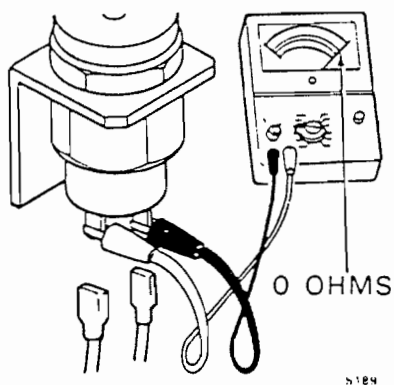
- 6.a. Turn ignition switch on.
- b. Press button switch in engine compartment.



- c. If click of control valve is heard, button switch is good.
- d. If no click is heard, turn ignition switch off.



- e. Remove wires from button switch.
- f. Connect meter to switch terminals as shown.
- g. Press button switch. Reading should be (0) resistance. If not, switch is defective and should be replaced. If reading is good, wiring or connections must be checked for breaks, shorts, or loose terminals. See diagram.



FUSES

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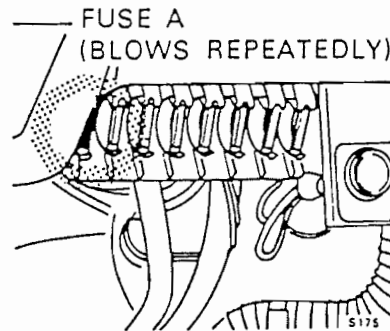
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● FUSE A BLOWS REPEATEDLY	153
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FUSES

FUSE A BLOWS REPEATEDLY

1.a. Fuse "A" Blows Repeatedly

- a. Check if non-Fiat accessories (radio, stereo, etc.) have been added later. If installed, proceed to step b. If not installed, go to step c.
- b. Check if power lead of accessory has been connected to fuse A (orange wire). If connected to fuse A, disconnect and connect to another fuse.



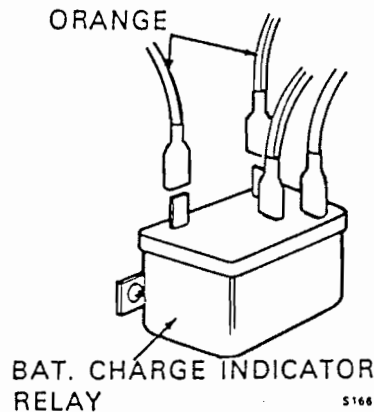
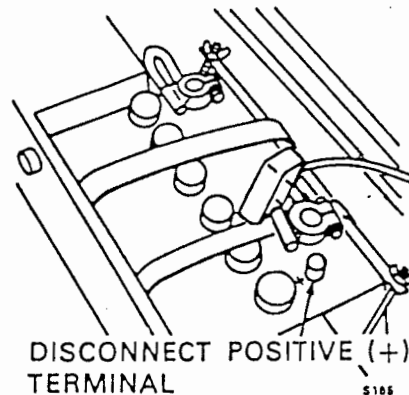
- 2.a. Get multimeter.
- b. Set up meter to measure ohms.

- 3.a. Disconnect battery positive (+) cable.

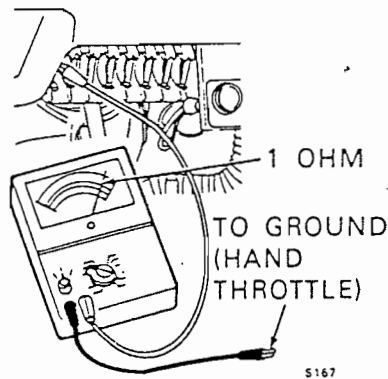
CAUTION

If battery is not disconnected, meter may be damaged.

- b. Disconnect orange wires from battery charge indicated relay in front of fuse panel on Spider, and in glove compartment on Sport Coupe.

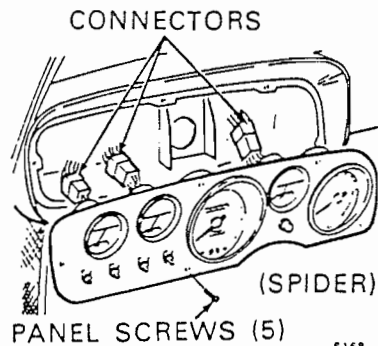


- 4.a. Remove fuse A. Connect meter red lead to top terminal of fuse A holder. Connect black meter lead to hand throttle (ground).
- b. Set controls as follows:
 - (1) Windshield wiper switch OFF.
 - (2) Direction signals lever OFF.
 - (3) Hand and foot brakes OFF.
 - (4) Gear shift neutral.
 - (5) Heater fan OFF. Proceed to step c.

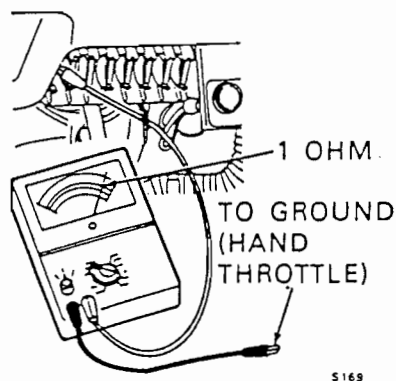


- c. Check meter reading. If meter indicates between 1 and 10 ohms, recheck setting of controls in step 4.b. If meter indicates less than 1 ohm, go to step 5.a. If meter indicates more than 10 ohms, go to step 5.b.

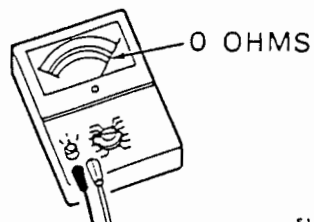
- 5.a. Remove instrument panel screws. Disconnect connector to heat gage. If meter reading increases to above 10 ohms, heat gage shorted, replace it. If meter reading does not increase, replace connector. Repeat above procedure for fuel gage, oil pressure gage and tachometer. If no instruments are shorted, check orange wires for bare insulation. Repair any defective wires.



- b. While watching meter, operate windshield wiper switch to ON. If meter decreases to below 1 ohm, wiper circuit shorted, go to accessories. If circuit O.K., operate switch to OFF.

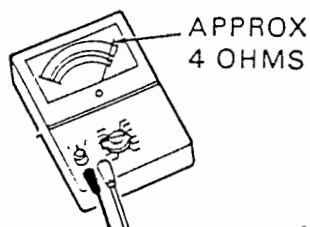


- c. Operate direction indicator switch in both directions. If meter decreases to 0, direction signals shorted. Go to external lighting, operate switch to OFF.



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- d. Operate heater fan switch. Meter should read about 4 ohms. If meter reads near 0, heater shorted. Go to accessories.

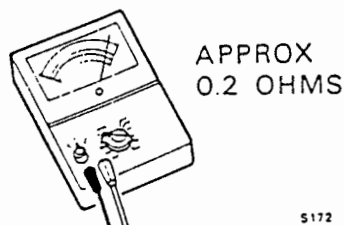


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- e. Move gearshift to reverse, meter should indicate about 0.2 OHMS. If meter at 0, backup light wiring shorted, go to EXTERNAL LIGHTING.

CAUTION

The resistance of the back-up lights is normally very low. Read meter carefully to avoid errors.

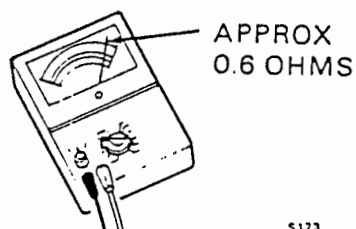


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- f. Depress brake pedal. Meter should indicate about 0.6 ohms. If meter indicates near 0, brake light circuit shorted. Go to external lighting.

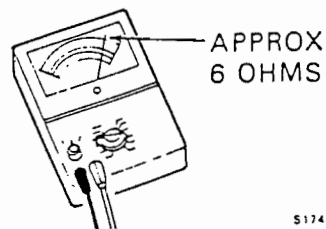
CAUTION

Resistance of brake lights is normally low. Read meter carefully to avoid errors.



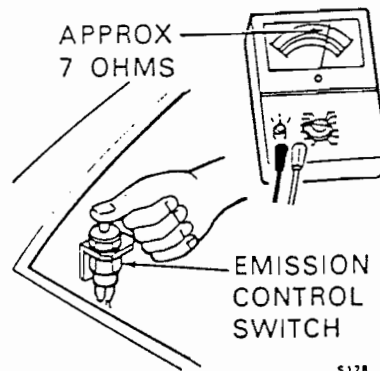
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- g. Apply hand brake. Resistance should drop to about 6 ohms. If meter indicates near 0, hand brake warning light shorted. Go to internal lighting.



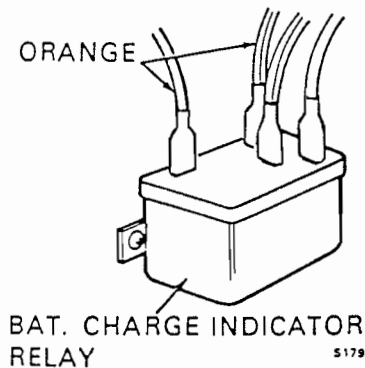
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- h. Go to engine compartment. Depress exhaust emission control switch. Meter should drop to about 7 ohms. If meter drops to near 0, repair exhaust emission control circuit.



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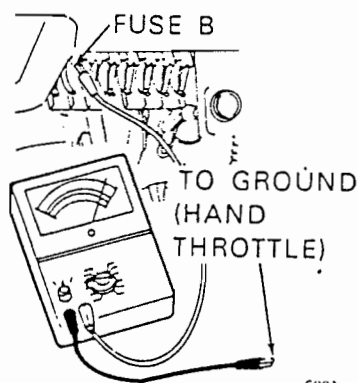
- i. If above procedures do not disclose short circuit, connect orange wires to battery charge indicator relay. Meter should indicate about 5 ohms. If meter indicates near 0, replace indicator relay.



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FUSE B BLOWS REPEATEDLY

- 1.a. Disconnect battery positive cable.
- b. Remove fuse B.
- c. Get meter. Set up to measure ohms. Connect meter positive (+) red lead to top terminal of fuse holder. Connect black negative (-) lead to hand throttle.
- d. If meter indicates less than 1-ohm, proceed to step e. If meter indicates more than 2-ohms, go to step g.
- e. Disconnect small white or small violet wire from top of fuse holder. If meter reading increases, check white wires to courtesy lights for bare wires rubbing on frame. In damaged cars, check carefully in damaged areas. If meter reading did not increase, go to step f.
- f. Connect small wire to fuse-holder. Disconnect large violet wire or wires from top of fuse-holder. If meter reading increases, check violet wire to horn relay. Check violet wire to cigarette lighter (if installed). Check above wires for bare wires rubbing on body. If wires O.K., connect violet wire to fuse holder. Disconnect violet wire from horn relay. If meter reading increases, replace relay.



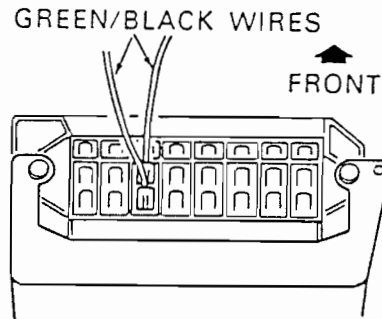
- g. Check blue wires from horn relay to horn. Check wires carefully where wire runs between mud guard and fender on Spider. If blue wire is O.K., check horn adjustment in ACCESSORIES Section.

NOTE

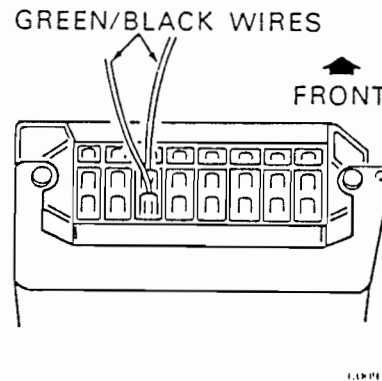
An improperly adjusted horn can cause fuses to blow.

FUSE C BLOWS WHEN HIGH BEAMS ARE TURNED ON

- 1.a. On Spider, inspect for bare insulation, the green/black wire from lower terminal on fuse to left headlight. Check carefully where wires run near sharp edges in frame. On damaged cars, check carefully in damaged areas.
- b. If wire O.K., inspect green/black wire from top terminal of fuse holder to indicator light in speedometer.



- 2.a. On Coupe, inspect for bare insulation, the green/black wire from rear terminal on fuse holder to left headlight. Check carefully where wires run near sharp edges in frame. On damaged cars, check carefully in damaged areas.
- b. If wire O.K., check green/black wire from front terminal on fuse holder to indicator light in tachometer.



FUSE D BLOWS WHEN HIGH BEAMS ARE TURNED ON

- 1.a. Inspect for broken insulation, the green wire from fuse holder to right headlight. Check carefully where wires run near sharp edges in frame. On damaged cars, check green wire carefully in damaged areas.
- b. On Coupe, the green wire to right headlight runs from fuse holder, behind instrument panel, through battery compartment, right wheel fender to headlight.
- c. On Spider, the green wire runs from fuse holder, behind dash board, through firewall, through trunk, into fender, to right headlight.

FUSE E BLOWS WHEN HEADLIGHTS ARE TURNED ON

- 1.a. Check for broken insulation, the grey/black wire from fuse holder to left headlamp. Check carefully where wires run near sharp edges in frame. On damaged cars, check the wires carefully in damaged areas.
- b. On Coupe, the grey/black wire runs from fuse holder, through firewall, battery compartment, in fender to left headlight.
- c. On Spider, the grey/black wire runs from fuse holder, through firewall, trunk, and left fender to left headlamp.

FUSE F BLOWS WHEN HEADLIGHTS ARE TURNED ON

- 1.a. Check the grey wire from fuse holder to the right headlamp for bare wire rubbing on frame. Check carefully where wires run near sharp edges in frame. On damaged cars, check the wires carefully in damaged areas.
- b. On Coupe, the grey wire to right headlamp runs from fuseholder, behind the instrument panel, through the battery compartment and fender, to headlight.
- c. On Spider, the grey wire runs from fuse holder, behind dashboard, through firewall, through trunk, into fender, to right headlight.

FUSE G BLOWS WHEN LIGHTS ARE TURNED ON

1.a. Circuits protected by fuse G.

- Front left parking light
- Parking light indicator
- Right rear parking light
- License plate light
- Engine compartment lamp
- Front left side lamp
- Right rear side lamp

- b. If car has been damaged in the front or rear fenders, check the yellow/black wires to the parking and side lights in the damaged areas. Check the wires for broken insulation where the wires run near the frame.
- c. If the car is not damaged, remove both yellow/black wire terminals from fuse g. Replace fuse. Turn on lights. Reconnect single wire terminal to fuse go. If fuse blows, short is in yellow/black wiring to right rear parking light, left license plate light, engine compartment light, or right rear side light.
- d. If fuse did not blow in step c, reconnect double wire terminal to fuse g. If fuse blows, short is in yellow/black wiring to front left parking light, parking light indicator, or front left side lamp.

FUSE H BLOWS WHEN LIGHTS ARE TURNED ON

1.a. Circuits protected by fuse H.

- Front right parking light
- Rear left parking light
- License plate light (right)
- Instrument lights
- Front right side light
- Rear left side light

b. If car has been damaged in front or rear fenders, check the yellow wires to the parking and side lights in the damaged areas. Check the wires for broken insulation where the wires run near the frame.

c. If the car is not damaged, remove both yellow wire terminals from fuse H. Replace fuse. Turn on lights. Connect single wire terminal to fuse. If fuse blows, short is in yellow wires to rear left parking light, right license plate light, or the rear left side light.

d. If the fuse did not blow in step c, reconnect double wire terminal to fuse. If fuse blows, short is in yellow wires to front right parking light, instrument lights, or front right side light.